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AXBT Measurements in the Norwegian and Iceland Seas, May 1987

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Abstract

Operational components of the United States Navy are becoming increasingly interested in the potential of coupled ocean-acoustic forecast systems for improving weapons effectiveness predictions. Such systems would combine in situ and remotely sensed data, historical databases, ocean hydrodynamic and thermodynamic numerical models and acoustic performance prediction models to give an improved picture of the ocean environment both in a "nowcast" and in a forecast mode. The Tactical Oceanography Program is a major focal point in NORDA's development, testing and delivery of such systems.

This Note discusses the experimental design, data collection and processing, and some preliminary results from the First Tactical Oceanography Project Prediction Experiment in the Norwegian and Iceland Seas in May 1987. Detailed charts of the survey positions are presented, as well as plots of all of the profiles. A more complete presentation of the descriptive findings from the experiment is given in the companion NORDA Technical Note, "Environmental Conditions in the Norwegian and Iceland Seas, May 1987" by J. Boyd.

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Keynote: Norwegian Sea; Physical
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AXBT Measurements in the Norwegian and Iceland Seas, May 1987

Introduction

Between 15 and 30 May 1987, eight research aircraft flights were conducted in the Norwegian and Iceland Seas as part of the field effort for the First Tactical Oceanography Program "GIN Sea" Prediction Experiment. The work was undertaken to resolve the thermal structure of the Norwegian and Iceland Seas on a variety of time and space scales in order to provide initialization and validation data for numerical thermodynamic, hydrodynamic, and acoustic models and to contribute to an improved understanding of the circulation and frontal structure of the area. The data were immediately processed into a form suitable for the ground complement, whose task was to develop and test procedures and software for forecasting ocean thermal structure, currents, and acoustic propagation under operational conditions.

The observational effort during this time period had five goals: (1) to provide near-real-time initialization and validation fields of the Iceland-Faeroe Frontal region for NORDA's version of the Thermodynamic Ocean Prediction System (TOPS); (2) to provide near-real-time initialization and validation fields of the Iceland-Faeroe Frontal region for the tactical scale Harvard open boundary ocean dynamic prediction model; (3) to provide initialization fields for the NORDA regional ocean circulation model of the Greenland, Iceland, and Norwegian Seas; (4) to provide near-real-time analyzed and calculated sound speed fields for tactical scale range dependent acoustic predictions; (5) to acquire a dataset that would contribute to an improved understanding of the regional hydrography, circulation, and frontal structure. All goals were met to a greater or lesser extent.

Experimental Plan and Operations Description

The numerical modeling data requirements were quite different in their time and space scales, and the experimental plan was a compromise between the resources available and the optimum data collection strategies for the thermodynamic, hydrodynamic and acoustic models. The thermodynamic model has time scales of a few hours to about 3 days and vertical scales of a few meters to perhaps 100 m. The local or tactical scale (the words are used interchangeably) model has time scales of a few days to a few weeks, vertical scales of tens to several hundred meters, and horizontal scales of tens to several hundred kilometers. The regional model's time scales are weeks to months and its space scales several hundred meters in the vertical and tens to several thousand kilometers in the horizontal. The range dependent acoustic models assume the data is coincident in time and have spatial scales of tens of meters in the vertical and tens of meters to tens of kilometers in the horizontal.

The availability of field resources strongly constrained the experimental design. Resources were not available for simultaneous ship and aircraft measurements, and the need for large area synoptic surveys dictated the choice of aircraft, although this meant no coincident salinity data would be available. Largest changes in the surface mixed layer occur in spring and fall, so aircraft time in May was requested. Approximately three weeks were granted on one of the Naval Research Laboratory's research P-3 aircraft, which allowed for an operations time period of 16 days, 15 May - 30 May 1987. A ninth flight underflying the GEOSAT altimetry satellite's track across the Norwegian Current Front parallel to the Norwegian Coast

occurred on 1 June as part of the NORDA Remote Sensing Branch's investigation into the use of satellite altimetry in the region; this data is not reported on here.

The Norwegian-Iceland Seas region was broken down into the five areas shown in Figure 1. Four flights were devoted to obtaining quasi-synoptic surveys of the Iceland-Faeroe Frontal region which was selected for intensive near-real time thermodynamic, tactical scale hydrodynamic, and acoustic modeling efforts. Station spacing was 20-30 nmi (37 - 55 km). One flight each was assigned to the Iceland Sea, the central Jan Mayen Frontal zone, and the Northern and Southern Norwegian Sea. Station spacing was 20 - 60 nmi (37 - 110 km), with the closer spacings being used in the vicinity of the expected frontal positions. The base of operations was Keflavik, Iceland.

The AXBTs (US Navy designation AN/SSQ-36) were all manufactured by Sippican Ocean Systems of Marion, MA. Most were produced under contract numbers NOO 163-83-C-0003 (NALC 8W59: shallow probes) and NOO 163-83-C-0003 (NALC 8W52: deep probes). Four hundred twenty six shallow (nominally 305 m) and fifty two deep (nominally 750 m) AXBTs were successfully deployed and analyzed. The ensemble of drop positions is shown in Figure 1. All figures have been produced using the NORDA Physical Oceanography Branch Isis airborne data acquisition, processing, and analysis system which consists of integrated aircraft installed and ground-based components that allow full processing and some analysis of the data to be performed while still in the field. The dates and regions of operations were:

Flight	Date	Region
1	15 May 1987	Iceland-Faeroe Frontal region
2	18 May 1987	Iceland-Faeroe Frontal region
3	20 May 1987	Jan Mayen Front
4	22 May 1987	Iceland-Faeroe Frontal region
5	24 May 1987	Iceland Sea
6	26 May 1987	Iceland-Faeroe Frontal region
7	28 May 1987	Southern Norwegian Sea
8	30 May 1987	Northern Norwegian Sea

The regions are indicated on Figure 1, and the successful drop positions for each flight day are shown in Figures 2 - 9 on the same scale as in Figure 1.

Personnel

The following personnel participated in part or all of the operations:

NORDA:

Janice D. Boyd, Oceanographer, Chief Scientist
Glen W. McCordle, Electronics Engineer
Joseph W. McCaffrey, Supervisory Oceanographer
Richard K. Myrick, Physical Science Technician

Planning Systems, Inc.:

Robert D. Broome, Oceanographer

Navigation

The on-board VLF/Omega system was used for navigation, with periodic comparisons with the Litton 72 inertial navigation system. The navigational accuracy was estimated by calculating the aircraft position error upon landing, approximately 9 hours after initialization of the systems. This averaged 2-3 nautical miles for the VLF/Omega and about 3-4 for the Litton 72. Because of the potential but unknown effects of wind upon the falling probes, the drop positions are considered accurate to about 1.5 times the navigational accuracy, or about 4 nautical miles (about 7 km).

Data Collection and Processing

These operations were the first field use of the preliminary version of the Isis data acquisition, processing and analysis system, which is a direct outgrowth and extension into the processing and analysis arena of the NORDA EPDAS (Expendable Probes Data Acquisition System) airborne data acquisition system (Holland et al., 1982; Brundage et al., 1985; Boyd et al., 1986). Equipment problems which arose resulted in the use of three different acquisition system configurations over the duration of the experiment. During the first flight the acquisition system consisted of the Isis data interface unit, an IBM PC/AT-compatible computer (a Zenith Z-248), and a Racal analog tape recorder. The Z-248 microcomputer proved unreliable under aircraft conditions and was replaced for flights 2 - 7 with an HP 9000 Series 320 master controller for data acquisition and, for data storage, an HP 9825T slave computer with data cassettes. The HP 9825 malfunctioned near the end of Flight 7 and the system was reconfigured to have the HP 9000/320 save data on 3.5" microdiskettes. Unfortunately, the Racal analog recorder was available only on the first flight, so the occasional drop which was not recorded on the primary storage medium due to system or operator problems could not be retrieved for flights taking place after 15 May.

All systems performed the same operations with the incoming data. The variable frequency analog signals from the three aircraft sonobuoy receivers (channels 12, 14, and 16, or 170.5, 172.0, and 173.5 MHz) were received, amplified, filtered, and digitized at 10 Hz (about every 15 cm in depth). During Flight 1 incoming data was also sent to a backup analog tape for later replay, if necessary. Data from up to three simultaneous probes were displayed in real time on the CRT display, and for flights 2 - 8, a near real-time hardcopy plot was produced for each drop to be used in post-flight analysis. Data was stored on a variety of storage media for later processing: Flight 1, 5.25" floppy diskettes and analog tapes; Flights 2 - 7, data

cassettes; and Flight 8, 3.5" microdiskettes. Total time required between probe launch and final data storage while flying at the usual 19,000' was about 6 minutes for shallow probes and 12 minutes for deep.

For the near-real-time modeling efforts, suitable data was needed within 24 hours of completion of a flight and preferably much sooner. The PC-based Isis acquisition, processing, and analysis system was able to fully process the raw data and supply it to the models at fixed depth resolution or by major inflection points. The particular PC used on the aircraft during this experiment, the Z-248, proved to be neither sufficiently reliable nor powerful enough to perform all the desired acquisition functions and so was replaced. The first flight's data was processed by the ground-based PC, but subsequently the data had major inflection points digitized from the near-real-time hard copy plots. Digitization was first done by hand and later with the ground-based PC and a digitizing tablet which was sent to Keflavik to replace the original tablet which had been lost or stolen during shipment.

After return to NORDA, the raw data was reprocessed into the form presented here and archived at 1 m and 2 m resolution. Processing first consisted of assembling raw data from the three different primary storage media into the Isis system RAW data format on the IBM PC/AT compatible Zenith Z-248 computer. The details will not be discussed; hopefully there will never be occasion to do this again. Then the following standard Isis processing procedures were employed. Navigation data was merged into the dataset and other corrections were made to the dataset headers. A 21 point median filter was applied to the 10 Hz raw data to remove most of the one to several point data "glitches" and spikes that arise for a number of reasons and to filter out much of the high frequency noise in the profiles. The raw data was then converted to engineering units using the following conversion equations (Boyd, 1987). For temperature,

$$T = -38.6045 + 2.71075 \times 10^{-2}F$$

where F is frequency in hertz and T is temperature in degrees centigrade. Temperature accuracy is about 0.2°C; precision is up to an order of magnitude better (Boyd, 1987).

The conversion equation for depth is different for shallow or deep probes. For shallow probes the equation was

$$z = 1.5573t - 3.01 \times 10^{-4}t^2$$

and for deep,

$$z = 1.6325t - 2.15 \times 10^{-4}t^2$$

where z is depth in meters and t is elapsed time (in seconds) after probe release. Depth accuracy is around 5 m; precision is up to an order of magnitude better (Boyd, 1987).

After conversion to engineering units, the data was decimated to a 1 meter resolution, and a final 9 point median filter was applied to complete the smoothing process. In many instances the final 9 point filter did not appear subjectively to be needed. However, in other cases it was necessary, especially to eliminate the enhanced noise that sometimes is observed at depth near the end of a profile when atmospheric

conditions cause ducting of the transmitted signal (Boyd, 1986). In order to maintain processing consistency over the whole dataset, the second filtering operation was applied to all profiles. For mesoscale purposes this has no detrimental effect.

The processed data were then visually scanned, primarily to detect instances where the probe had hit bottom before wire break and to find occasional data spikes at the very beginning or end of the profile which were not removed by the filtering process. These and a few other identified problems were removed using the Isis system interactive screen editor. In addition, occasionally operator error resulted in a late start of the acquisition procedure for a probe. When this happened the depths were offset by an unknown but usually estimatable amount. During this final scanning process, depth offsets were estimated from notes made in the field log and by comparison with nearby profiles, and a depth correction and extension to the surface was made. Drops for which this could not be done were discarded.

Discussion

The data obtained during May 1987 were generally of excellent quality. They are grouped into the 5 regions shown in Figure 1, all drop positions are also shown in Figure 1, and the drop positions for the individual flights are given in Figures 2 - 9. A listing of all successful drops, along with depth, position, and date/time is given in Table 1. More detailed drop positions and station numbers and the 1-m resolution temperature versus depth profiles themselves for each flight day are presented in Appendices A - H.

The horizontal temperature contours given in Figures 10 - 15 were produced by combining the data from all eight flights into one near-synoptic dataset for the Norwegian and Iceland Seas. These data have been used by Harvard University modelers in their "Gapcast" modeling effort (Denbo and Robinson, 1988a and b), and will be used to provide an initialization field for the NORDA regional hydrodynamic model being developed for the area. In addition, the data will be analyzed to provide a better understanding of the regional hydrography, circulation, and frontal structure. Some comments on the major features of Figures 10 - 15 follow.

A notable feature of the Norwegian and Iceland Seas is the occurrence of five major fronts separating important water masses in the area. The Norwegian Current Front paralleling the Norwegian coast separates the western boundary of the inflowing Atlantic water of the Norwegian Current from the waters of the Norwegian Sea itself. The Jan Mayen Front separates the cold, relatively fresh waters of the Iceland Sea from the warmer and saltier waters of the Norwegian Sea, while the Iceland-Faeroe Front (often called the Polar Front) marks the boundary between the warm and saline North Atlantic water of the Irminger Current from the colder, fresher waters flowing southward from the Iceland Sea.

The Irminger Current loops around the western edge of Iceland and flows along the island's northern coast as a current known by various names, including the Kolbeinsey Current, the East Icelandic Current, or the Iceland Current. Another frontal zone, the Kolbeinsey Current Front, exists along the northern edge of this current, separating it from the Polar Water of the Iceland Sea.

The fifth front, the East Greenland Current Front, parallels the Greenland coast and separates the eastern boundary of the cold, fresh, southward flowing East Greenland Current from the somewhat more saline waters of the Iceland Sea.

Four of the five major frontal features of the region are apparent in the temperature contours at 0, 50, 100, 200, 300, and 375 m (Figures 10 - 15): the Norwegian Current Front between about 0° - 6°E, the Jan Mayen Front north of 65°N and between 5° - 10°W, the Iceland-Faeroe Front between Iceland and the Faeroe Islands, and the Kolbeinsey Current Front north of Iceland. Little data was obtained in the expected region of the East Greenland Current and in the Denmark Strait between Greenland and Iceland because of very heavy ice cover. According to Aagaard and Coachman (1968), the East Greenland Current Front can be approximated by the 0°C isotherm at 50 m. However, the 0°C isotherm in Fig. 11 is probably too far offshore for it to be delineating the location of the Front. There may well have been too few data points to allow an accurate location of the Front, which is usually defined through salinity as well as temperature.

The Norwegian Current, Jan Mayen, and Iceland-Faeroe Fronts lie close to their 1980 - 81 locations as described by Smart (1984). Their positions appear to be related to bathymetry, but their precise locations vary, and meanders and eddies are prevalent. The northward meander of the upper several hundred meters of the Iceland Faeroe Front near 10°W is particularly noticeable. It persisted throughout all four surveys of the Front, although its shape and depth of penetration varied. Such features have also been observed along this front in the past, although not during every investigation (Smart, 1984).

More details on the descriptive results from this experiment is given in the companion NORDA Technical Note "Environmental Conditions in the Norwegian and Iceland Seas, May 1987" by J. Boyd.

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Table 1. Probe type, depth (S=shallow, D=deep), position, and time for all flights, May 1987.

DATE: 5/15/87 FLIGHT: 1

REGION: ICELAND-FAEROE FRONT

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
1	AXBT	S	62 40.20	-10 -22.10	10:16:33
2	AXBT	S	62 40.90	-9 -11.80	10:16:36
3	AXBT	S	63 .30	-5 -24.10	10:47:00
4	AXBT	S	63 31.00	-5 -16.00	10:53:00
5	AXBT	S	63 58.70	-5 -9.60	11:01:00
6	AXBT	S	64 32.00	-5 -2.00	11:07:00
7	AXBT	S	65 2.90	-4 -53.80	11:15:00
8	AXBT	S	65 34.00	-4 -45.80	11:21:00
9	AXBT	S	66 .40	-4 -38.70	11:27:00
10	AXBT	S	66 31.50	-4 -29.40	11:34:00
11	AXBT	S	67 .30	-4 -20.90	11:40:00
12	AXBT	S	67 3.50	-5 -32.10	11:46:00
13	AXBT	S	66 36.50	-5 -46.70	11:51:00
14	AXBT	S	66 19.50	-5 -53.80	11:55:00
15	AXBT	S	65 46.40	-6 -.60	12:01:00
16	AXBT	S	65 35.10	-6 -2.10	12:03:00
17	AXBT	S	65 19.20	-6 -4.50	12:07:00
18	AXBT	S	64 59.70	-6 -7.70	12:10:00
19	AXBT	S	64 39.70	-6 -11.10	12:14:00
20	AXBT	S	64 19.70	-6 -14.50	12:17:00
21	AXBT	S	63 39.20	-6 -20.40	12:26:00
22	AXBT	S	63 20.20	-6 -23.10	12:30:00
23	AXBT	S	62 59.80	-6 -27.80	12:34:00
24	AXBT	S	62 55.30	-7 -36.80	12:41:00
25	AXBT	S	63 20.90	-7 -42.20	12:47:00
28	AXBT	S	63 40.90	-7 -37.80	12:52:00
29	AXBT	S	64 .60	-7 -31.80	12:56:00
30	AXBT	S	64 20.40	-7 -24.80	13:00:00
31	AXBT	S	64 41.40	-7 -19.20	13:05:00
32	AXBT	S	65 .40	-7 -17.00	13:08:00
33	AXBT	S	65 20.20	-7 -14.40	13:12:00
34	AXBT	S	65 40.20	-7 -10.70	13:17:00
36	AXBT	S	66 20.20	-7 -.10	13:25:00
37	AXBT	S	66 40.10	-6 -56.20	13:29:00
38	AXBT	S	66 59.60	-6 -52.80	13:33:00
39	AXBT	S	67 2.60	-8 -8.90	13:39:00
40	AXBT	S	36 40.10	-8 -16.40	13:44:00
41	AXBT	S	66 19.80	-8 -19.20	13:48:00
42	AXBT	S	65 58.90	-8 -21.50	13:53:00
43	AXBT	S	65 39.80	-8 -23.00	13:57:00

44	AXBT	S	65	19.80	-8	-24.50	14:02:00
45	AXBT	S	64	40.10	-8	-29.20	14:09:00
46	AXBT	S	64	20.20	-8	-31.40	14:13:00
47	AXBT	S	63	59.80	-8	-33.60	14:18:00
48	AXBT	S	63	38.50	-8	-35.80	14:22:00
49	AXBT	S	63	19.10	-8	-37.50	14:26:00
50	AXBT	S	62	58.80	-8	-40.00	14:30:00
51	AXBT	S	62	59.60	-9	-19.10	14:34:00
52	AXBT	S	63	22.60	-9	-18.70	14:38:00
53	AXBT	S	63	39.50	-9	-20.50	14:43:00
54	AXBT	S	63	59.70	-9	-20.20	14:47:00
55	AXBT	S	64	22.10	-9	-20.10	14:51:00
56	AXBT	S	64	41.50	-9	-20.70	14:55:00
57	AXBT	S	65	1.00	-9	-21.90	14:58:00
58	AXBT	S	65	40.20	-9	-24.60	15:06:00
59	AXBT	S	65	40.60	-10	-53.30	15:16:00
60	AXBT	S	65	20.70	-10	-48.80	15:20:00
61	AXBT	S	65	.00	-10	-48.40	15:25:00
62	AXBT	S	64	34.50	-10	-49.10	15:30:00
63	AXBT	S	64	20.30	-10	-49.30	15:33:00
64	AXBT	S	64	.30	-10	-49.70	15:37:00
65	AXBT	S	63	39.40	-10	-49.70	15:41:00
66	AXBT	S	63	39.70	-12	-1.30	15:49:00
67	AXBT	S	64	19.60	-11	-59.80	15:57:00
68	AXBT	S	64	39.60	-12	.00	16:01:00
69	AXBT	S	65	19.80	-12	-1.40	16:09:00
70	AXBT	S	65	39.80	-12	-2.00	16:12:00
71	AXBT	S	66	.10	-12	-3.10	16:16:00
72	AXBT	S	66	20.00	-12	-3.60	16:20:00
73	AXBT	S	66	40.70	-12	-3.40	16:24:00
74	AXBT	S	67	.00	-12	-6.10	16:30:57
76	AXBT	S	67	.00	-12	-47.00	16:40:04
77	AXBT	S	66	.00	-12	-52.10	16:40:06
78	AXBT	S	64	59.40	-12	-50.30	16:58:37

TOTAL NO. OF PROBES: 74

DATE: 5/18/87 FLIGHT: 2
 REGION: ICELAND-FAEROE FRONT

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
119	AXBT	S	64 20.20	-13 -14.20	09:44:31
120	AXBT	S	63 59.70	-13 -12.40	09:48:13
121	AXBT	D	63 40.10	-13 -10.40	09:52:51
123	AXBT	D	63 .30	-13 -7.50	10:01:25
125	AXBT	S	63 2.30	-10 -55.10	10:14:00

126	AXBT	D	63	1.30	-9	-49.00	10:19:43
128	AXBT	D	62	59.20	-7	-33.40	10:31:40
130	AXBT	D	63	20.00	-6	-27.60	10:52:39
132	AXBT	S	63	40.50	-6	-24.90	11:01:09
133	AXBT	D	64	20.00	-6	-18.10	11:05:08
134	AXBT	S	64	40.00	-6	-14.00	11:09:11
135	AXBT	S	65	.00	-6	-9.90	11:13:33
136	AXBT	D	65	19.70	-6	-6.50	11:17:59
137	AXBT	S	65	39.60	-6	-2.70	11:22:10
138	AXBT	D	65	54.60	-5	-59.60	11:26:32
139	AXBT	S	65	59.70	-7	-6.30	11:34:04
140	AXBT	S	65	40.00	-7	-9.90	11:37:50
141	AXBT	D	65	20.30	-7	-15.00	11:41:53
142	AXBT	S	65	.50	-7	-18.00	11:46:05
144	AXBT	S	64	19.70	-7	-20.70	11:54:18
145	AXBT	D	63	59.60	-7	-21.30	11:58:15
146	AXBT	S	63	40.10	-7	-21.90	12:02:00
147	AXBT	S	63	19.80	-7	-22.40	12:05:53
148	AXBT	S	63	19.50	-8	-33.70	12:16:37
149	AXBT	D	63	40.20	-8	-33.60	12:20:37
150	AXBT	S	64	.00	-8	-34.50	12:24:56
151	AXBT	S	64	20.10	-8	-32.80	12:29:16
152	AXBT	S	64	42.00	-8	-30.30	12:34:05
153	AXBT	D	64	59.60	-8	-28.80	12:38:18
154	AXBT	S	65	20.10	-8	-27.40	12:42:07
155	AXBT	S	65	39.60	-8	-25.70	12:46:43
156	AXBT	D	65	59.70	-8	-23.40	12:50:18
158	AXBT	S	66	17.30	-9	-33.80	13:09:25
159	AXBT	S	65	58.40	-9	-51.30	13:13:37
161	AXBT	S	65	19.00	-10	-9.40	13:21:23
163	AXBT	S	64	31.10	-10	-28.50	13:43:25
164	AXBT	D	64	18.40	-10	-32.90	13:45:49
165	AXBT	S	63	57.50	-10	-41.40	14:13:36
166	AXBT	S	63	39.40	-10	-46.10	14:19:43
167	AXBT	S	63	20.60	-10	-52.80	14:21:37
168	AXBT	S	63	21.20	-11	-20.40	14:25:28
169	AXBT	D	63	39.30	-10	-52.30	14:30:16
170	AXBT	S	63	59.30	-10	-51.30	14:35:02
171	AXBT	S	64	22.60	-10	-50.60	14:40:20
172	AXBT	S	64	40.60	-10	-50.40	14:45:13
173	AXBT	D	64	59.70	-10	-49.90	14:49:02
174	AXBT	S	65	19.60	-10	-49.70	14:53:43
175	AXBT	S	65	40.10	-10	-50.00	14:58:26
176	AXBT	D	65	59.60	-10	-51.30	15:03:17
177	AXBT	S	66	19.50	-10	-51.60	15:08:10
178	AXBT	S	66	40.60	-10	-51.60	15:13:25
179	AXBT	S	66	.50	-12	-3.40	15:25:55
180	AXBT	D	65	40.00	-12	.20	15:30:10

181	AXBT	S	65	18.40	-11	-59.50	15:34:48
182	AXBT	S	65	.40	-12	-.10	15:38:32
183	AXBT	S	64	40.70	-12	-1.20	15:42:47
184	AXBT	D	64	20.40	-12	-1.10	15:47:07
185	AXBT	S	64	.50	-12	-1.10	15:51:25
187	AXBT	D	63	20.50	-11	-59.10	16:00:02

TOTAL NO. OF PROBES: 59

DATE: 5/20/87 FLIGHT: 3
REGION: JAN MAYEN FRONT

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
202	AXBT	S	67 20.50	-10 -26.30	09:54:33
204	AXBT	S	67 23.50	-8 -43.40	10:02:25
206	AXBT	S	67 24.40	-6 -57.90	10:10:15
207	AXBT	S	67 23.90	-6 -6.80	10:14:15
208	AXBT	S	67 22.70	-5 -13.10	10:18:27
209	AXBT	S	67 20.40	-3 -54.00	10:24:39
210	AXBT	S	67 49.30	-3 -43.10	10:34:17
211	AXBT	S	67 51.80	-5 -3.70	10:40:34
212	AXBT	S	67 52.10	-5 -58.60	10:44:55
213	AXBT	S	67 51.90	-6 -51.90	10:49:03
214	AXBT	S	67 51.00	-7 -43.40	10:53:10
215	AXBT	S	67 50.30	-8 -36.00	10:57:22
217	AXBT	S	67 49.20	-10 -23.70	11:05:52
218	AXBT	S	67 49.10	-11 -15.40	11:09:57
219	AXBT	S	67 49.20	-12 -7.80	11:14:14
220	AXBT	S	68 19.30	-11 -35.10	11:21:44
221	AXBT	S	68 17.80	-10 -11.70	11:27:22
222	AXBT	S	68 18.90	-9 -19.90	11:31:10
223	AXBT	S	68 20.00	-8 -24.60	11:35:21
224	AXBT	S	68 20.10	-7 -31.40	11:39:12
225	AXBT	S	68 20.50	-6 -35.60	11:43:17
227	AXBT	S	68 20.90	-4 -45.50	11:51:16
228	AXBT	S	68 20.00	-3 -35.90	11:56:00
229	AXBT	S	68 50.20	-3 -15.60	12:04:47
230	AXBT	S	68 49.80	-4 -42.80	12:11:24
231	AXBT	S	68 49.50	-5 -43.60	12:15:41
234	AXBT	S	68 50.00	-8 -53.40	12:30:04
235	AXBT	S	68 49.90	-10 -17.80	12:36:31
237	AXBT	S	69 20.60	-11 -30.00	12:49:30
238	AXBT	S	69 21.40	-10 -6.00	12:53:10
239	AXBT	S	69 20.10	-8 -39.70	13:00:36
240	AXBT	S	69 19.70	-7 -39.60	13:04:42
241	AXBT	S	69 19.20	-6 -43.20	13:08:21

243	AXBT	S	69	19.80	-4	-46.10	13:16:17
244	AXBT	S	69	20.30	-3	-52.10	13:20:00
245	AXBT	S	69	19.90	-2	-59.60	13:23:39
247	AXBT	S	69	49.80	-3	-48.30	13:37:05
249	AXBT	S	69	49.70	-5	-46.30	13:45:15
250	AXBT	S	69	50.00	-6	-45.80	13:49:26
252	AXBT	S	69	49.60	-8	-42.50	13:57:50
253	AXBT	S	69	49.30	-10	-8.50	14:04:15
255	AXBT	S	70	21.50	-11	-18.10	14:18:23
257	AXBT	S	70	19.00	-8	-19.30	14:29:30
258	AXBT	S	70	18.80	-6	-49.70	14:35:14
259	AXBT	S	70	19.40	-5	-21.50	14:41:01
260	AXBT	S	70	19.50	-4	-21.10	14:45:08
261	AXBT	S	70	59.00	-4	-31.30	14:57:42
264	AXBT	S	71	1.90	-9	-35.10	15:17:44
266	AXBT	S	70	59.10	-13	-.80	15:32:06
267	AXBT	S	70	20.30	-13	-4.80	15:39:37
269	AXBT	S	69	19.90	-12	-59.90	15:51:58
270	AXBT	S	68	51.00	-12	-58.40	15:57:12
271	AXBT	S	68	21.70	-12	-58.50	16:02:59
272	AXBT	S	67	53.00	-13	-.60	16:08:46
273	AXBT	S	67	23.90	-13	-3.00	16:14:37

TOTAL NO. OF PROBES: 55

DATE: 5/22/87 FLIGHT: 4
REGION: ICELAND-FAEROE FRONT

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
304	AXBT	D	64 19.80	-12 -.30	10:17:40
305	AXBT	S	64 39.80	-12 .00	10:20:33
307	AXBT	S	64 59.50	-12 -.50	10:28:48
308	AXBT	D	65 19.50	-12 -.90	10:29:58
310	AXBT	D	66 .00	-12 -3.30	10:37:07
311	AXBT	S	65 58.40	-10 -47.30	10:44:47
312	AXBT	S	65 39.80	-10 -47.10	10:48:27
313	AXBT	S	65 19.60	-10 -50.20	10:52:36
314	AXBT	D	65 .80	-10 -53.40	10:58:04
315	AXBT	S	64 40.70	-10 -53.70	11:00:49
316	AXBT	S	64 20.70	-10 -55.00	11:05:00
318	AXBT	D	63 41.40	-10 -56.70	11:13:17
319	AXBT	S	63 21.00	-10 -58.10	11:17:39
320	AXBT	S	63 21.20	-9 -49.90	11:26:09
321	AXBT	S	63 34.60	-9 -48.60	11:29:11
320	AXBT	S	63 21.20	-9 -49.90	11:26:09
321	AXBT	S	63 34.60	-9 -48.60	11:29:11

322	AXBT	S	63	55.40	-9	-47.70	11:33:29
324	AXBT	S	64	36.30	-9	-45.20	11:41:59
325	AXBT	S	64	56.20	-9	-44.30	11:46:15
326	AXBT	S	65	16.20	-9	-43.70	11:50:17
327	AXBT	D	65	39.20	-9	-42.30	11:54:56
328	AXBT	S	65	56.20	-9	-40.60	11:58:31
329	AXBT	D	65	53.00	-8	-25.40	12:05:13
330	AXBT	S	65	37.40	-8	-26.30	12:08:30
331	AXBT	S	65	17.60	-8	-31.00	12:12:35
332	AXBT	D	64	57.60	-8	-33.90	12:16:42
333	AXBT	S	64	37.30	-8	-36.60	12:20:47
334	AXBT	D	64	19.20	-8	-39.00	12:24:35
336	AXBT	D	63	37.30	-8	-43.90	12:33:34
337	AXBT	S	63	16.70	-8	-46.90	12:38:59
338	AXBT	S	63	12.80	-7	-38.80	12:45:58
339	AXBT	S	63	28.30	-7	-38.20	12:49:00
341	AXBT	D	64	11.00	-7	-31.10	12:59:00
344	AXBT	S	64	50.60	-7	-25.80	13:10:08
345	AXBT	D	65	13.00	-7	-22.50	13:12:22
346	AXBT	S	65	32.00	-7	-19.70	13:15:11
348	AXBT	D	65	48.10	-5	-58.60	13:26:07
349	AXBT	S	65	32.50	-6	-3.30	13:29:17
351	AXBT	D	64	52.20	-6	-16.50	13:37:40
359	AXBT	S	63	45.20	-5	-27.90	14:12:09
360	AXBT	S	64	5.20	-5	-20.50	14:16:27
363	AXBT	S	65	6.60	-5	.90	14:29:02
365	AXBT	S	65	44.90	-4	-45.50	14:37:14
366	AXBT	S	65	41.40	-3	-31.20	14:43:52
367	AXBT	S	65	24.30	-3	-38.30	14:47:25
368	AXBT	S	65	4.20	-3	-47.10	14:51:26
369	AXBT	S	64	43.80	-3	-54.00	14:55:34
370	AXBT	S	64	23.10	-4	-1.70	15:00:04
372	AXBT	S	63	43.10	-4	-13.00	15:07:44
375	AXBT	S	62	58.70	-3	-18.50	15:23:07
377	AXBT	S	63	39.80	-3	-4.70	15:31:39
378	AXBT	S	64	.40	-2	-57.60	15:35:47
379	AXBT	S	64	20.90	-2	-49.90	15:39:56
381	AXBT	S	65	1.90	-2	-35.40	15:48:16
383	AXBT	S	65	41.60	-2	-20.30	15:56:21
384	AXBT	S	65	16.30	-1	-8.80	16:05:21
385	AXBT	S	64	53.20	-1	-20.30	16:09:59
386	AXBT	S	64	34.00	-1	-31.30	16:14:00
387	AXBT	S	64	13.40	-1	-42.10	16:18:22
389	AXBT	S	63	33.30	-2	-1.00	16:26:42
390	AXBT	S	63	12.80	-2	-8.70	16:30:45
391	AXBT	S	62	52.80	-2	-15.90	16:36:11
392	AXBT	S	62	33.80	-2	-22.80	16:34:48
393	AXBT	S	62	37.40	-3	-29.80	16:45:05

394	AXBT	S	62	43.70	-4	-27.10	16:51:11
395	AXBT	S	62	55.30	-5	-28.30	16:57:52
397	AXBT	S	62	55.10	-7	-37.90	17:12:09
400	AXBT	S	63	2.80	-10	-56.10	17:31:30
401	AXBT	D	63	3.70	-12	-4.70	17:37:56

TOTAL NO. OF PROBES: 68

DATE: 5/24/87 FLIGHT: 5

REGION: ICELAND SEA

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
402	AXBT	S	66 40.20	-14 -4.80	09:40:50
403	AXBT	S	66 59.50	-14 -1.30	09:45:07
404	AXBT	S	67 20.00	-14 -.60	09:49:12
405	AXBT	S	67 41.90	-14 -.70	09:53:35
406	AXBT	S	68 .50	-14 -.80	09:57:18
407	AXBT	S	68 20.60	-14 -1.90	10:01:29
408	AXBT	S	68 41.90	-14 -2.60	10:05:58
409	AXBT	S	69 .80	-14 -3.30	10:10:02
410	AXBT	S	69 20.80	-14 -2.50	10:14:13
412	AXBT	S	70 .90	-13 -57.00	10:22:53
413	AXBT	S	70 1.10	-15 .00	10:28:32
416	AXBT	S	69 21.90	-15 -57.60	10:41:17
417	AXBT	S	69 1.80	-16 .00	10:45:23
419	AXBT	S	68 18.80	-16 -1.50	10:54:28
420	AXBT	S	68 2.70	-16 -1.60	10:57:55
421	AXBT	S	67 42.00	-16 -.90	11:02:11
422	AXBT	S	67 21.80	-15 -59.90	11:06:14
423	AXBT	S	67 2.80	-15 -59.50	11:09:57
425	AXBT	S	66 40.20	-17 .00	11:19:18
427	AXBT	S	67 3.20	-18 -.10	11:28:11
428	AXBT	S	67 29.20	-17 -59.60	11:33:28
429	AXBT	S	67 43.00	-17 -59.80	11:36:05
430	AXBT	S	68 2.60	-18 -.10	11:40:14
431	AXBT	S	68 22.70	-18 -1.00	11:44:02
433	AXBT	S	69 3.40	-18 -.30	11:52:13
435	AXBT	S	69 43.40	-18 -1.40	11:59:42
437	AXBT	S	69 55.90	-19 -33.40	12:11:14
440	AXBT	S	69 .10	-19 -32.00	12:23:21
441	AXBT	S	68 39.70	-19 -29.50	12:27:29
442	AXBT	S	68 20.20	-19 -29.30	12:31:31
445	AXBT	S	67 19.90	-19 -29.60	12:43:58
446	AXBT	S	67 .10	-19 -31.60	12:48:13
447	AXBT	S	66 40.20	-19 -32.70	12:52:38
450	AXBT	S	67 2.10	-21 -4.80	13:04:41

451	AXBT	S	67	20.80	-21	-3.40	13:08:17
453	AXBT	S	68	.80	-20	-59.40	13:22:26
454	AXBT	S	68	20.10	-20	-59.60	13:26:37
459	AXBT	S	69	39.80	-21	-57.90	13:46:18
462	AXBT	S	68	40.00	-22	-.30	14:00:18
465	AXBT	S	67	39.90	-22	-.50	14:12:54
466	AXBT	S	67	20.00	-22	-.50	14:17:00
469	AXBT	S	67	.50	-22	-24.30	14:31:05
481	AXBT	S	67	28.10	-24	-47.30	15:18:18

TOTAL NO. OF PROBES: 43

DATE: 5/26/87 FLIGHT: 6
REGION: ICELAND-FAEROE FRONT

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
484	AXBT	D	65 39.90	-11 -58.00	10:21:15
485	AXBT	S	65 39.40	-10 -52.20	10:27:16
486	AXBT	D	65 39.40	-9 -43.50	10:33:36
487	AXBT	S	65 39.40	-8 -30.40	10:40:22
488	AXBT	S	65 39.90	-7 -17.40	10:47:06
489	AXBT	D	65 40.00	-6 -3.00	10:53:57
495	AXBT	S	63 38.70	-6 -26.90	11:55:31
496	AXBT	S	63 19.60	-6 -30.30	12:00:10
497	AXBT	D	63 .00	-6 -29.00	12:04:39
498	AXBT	S	63 .00	-7 -36.60	12:12:46
499	AXBT	S	63 18.50	-7 -33.60	12:17:35
500	AXBT	D	63 38.90	-7 -31.00	12:22:47
501	AXBT	S	63 58.80	-7 -28.20	12:27:59
502	AXBT	S	64 18.90	-7 -24.10	12:33:10
503	AXBT	S	64 39.90	-7 -22.80	12:38:38
504	AXBT	D	65 .40	-7 -21.00	12:43:57
505	AXBT	S	65 20.20	-7 -17.70	12:49:13
506	AXBT	S	65 20.00	-8 -31.30	12:57:23
507	AXBT	D	65 .00	-8 -31.00	13:02:21
508	AXBT	S	64 39.90	-8 -32.40	13:07:25
509	AXBT	S	64 20.10	-8 -35.60	13:12:19
510	AXBT	S	64 .00	-8 -37.20	13:17:17
511	AXBT	S	63 39.30	-8 -38.20	13:22:21
512	AXBT	D	63 20.00	-8 -39.90	13:27:00
513	AXBT	S	63 .00	-8 -42.70	13:31:57
514	AXBT	S	62 40.00	-9 -16.30	13:37:48
515	AXBT	D	62 20.00	-9 -51.20	13:43:53
516	AXBT	S	62 40.00	-9 -49.70	13:50:15
517	AXBT	D	63 .00	-9 -47.90	13:55:11
518	AXBT	S	63 20.00	-9 -47.60	14:00:05

519	AXBT	S	63	40.00	-9	-46.70	14:05:05
520	AXBT	S	64	.00	-9	-45.40	14:10:06
521	AXBT	D	64	20.10	-9	-44.10	14:15:24
522	AXBT	S	64	40.00	-9	-42.20	14:20:35
523	AXBT	S	65	.90	-9	-39.70	14:25:39
524	AXBT	S	65	21.50	-9	-37.60	14:30:40
525	AXBT	S	65	19.60	-10	-49.20	14:38:35
526	AXBT	S	65	.00	-10	-50.10	14:43:25
527	AXBT	S	64	39.60	-10	-51.80	14:48:23
528	AXBT	S	64	20.10	-10	-52.60	14:53:19
529	AXBT	S	64	.00	-10	-53.40	14:58:10
530	AXBT	S	63	40.20	-10	-52.50	15:02:45
531	AXBT	S	63	20.00	-10	-52.90	15:08:01
532	AXBT	S	63	.00	-10	-53.80	15:13:07
534	AXBT	S	62	19.80	-10	-52.50	15:22:57
537	AXBT	D	63	.00	-12	-3.70	15:39:57
538	AXBT	S	63	20.00	-12	-3.10	15:45:52
539	AXBT	S	63	44.10	-12	-4.20	15:49:54
540	AXBT	S	64	.00	-12	-4.20	15:53:39
541	AXBT	D	64	20.00	-12	-4.50	15:58:22
542	AXBT	S	64	40.30	-12	-5.70	16:02:58
544	AXBT	S	65	20.00	-12	-4.10	16:12:17
545	AXBT	S	64	39.90	-13	-22.30	16:26:03
546	AXBT	S	64	20.00	-13	-9.40	16:31:09
547	AXBT	D	64	.00	-13	-6.40	16:35:53
549	AXBT	S	63	40.00	-13	-4.50	16:43:27
550	AXBT	S	63	20.00	-13	-3.50	16:45:37
551	AXBT	S	63	.00	-13	-3.20	16:52:25
552	AXBT	S	62	40.00	-13	-2.50	16:55:22
553	AXBT	D	62	20.00	-13	-3.00	17:00:20
554	AXBT	D	62	20.00	-14	-13.80	17:08:28
555	AXBT	S	62	40.00	-14	-13.50	17:12:51
556	AXBT	S	63	.00	-14	-15.00	17:17:10
557	AXBT	D	63	20.00	-14	-17.00	17:21:31
558	AXBT	S	63	40.10	-14	-18.40	17:25:58
559	AXBT	S	64	.00	-14	-20.80	17:30:17
560	AXBT	S	64	20.00	-13	-48.00	17:36:00

TOTAL NO. OF PROBES: 67

DATE: 5/28/87 FLIGHT: 7
REGION: SOUTHERN NORWEGIAN SEA

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
561	AXBT	S	67 53.10	-2 -57.50	10:37:55
562	AXBT	S	67 26.80	-1 -47.90	10:46:18

563	AXBT	S	67	6.40	0	-51.30	10:53:09
564	AXBT	S	66	45.30	0	2.60	11:00:30
565	AXBT	S	66	23.20	0	57.10	11:07:23
566	AXBT	S	66	1.80	1	46.90	11:14:07
567	AXBT	S	65	40.10	2	36.60	11:21:03
568	AXBT	S	65	16.90	3	26.30	11:28:25
569	AXBT	S	64	51.00	4	23.00	11:36:43
570	AXBT	S	64	32.00	5	2.70	11:42:38
571	AXBT	S	64	10.00	5	48.80	11:49:31
572	AXBT	S	63	47.20	6	32.10	11:56:21
573	AXBT	S	63	21.70	5	46.00	12:03:08
574	AXBT	S	62	59.80	4	59.60	12:10:09
575	AXBT	S	63	22.30	4	15.50	12:15:59
576	AXBT	S	63	45.90	3	33.70	12:21:38
578	AXBT	S	64	32.00	2	4.60	12:33:07
579	AXBT	S	64	53.60	1	15.30	12:38:58
580	AXBT	S	65	16.20	0	24.00	12:45:14
581	AXBT	S	65	40.50	0	-29.50	12:51:51
582	AXBT	S	65	59.50	-1	-15.30	12:57:19
583	AXBT	S	66	19.50	-2	-7.30	13:03:15
584	AXBT	S	66	41.00	-3	-4.30	13:09:31
585	AXBT	S	67	.20	-3	-57.50	13:15:20
586	AXBT	S	66	17.50	-3	-16.70	13:27:59
587	AXBT	S	65	51.80	-2	-29.90	13:34:00
588	AXBT	S	65	23.00	-1	-56.30	13:40:28
589	AXBT	S	64	57.40	-1	-27.40	13:46:22
590	AXBT	S	64	29.30	0	-59.40	13:52:48
592	AXBT	S	63	59.40	0	3.50	14:01:52
593	AXBT	S	63	45.70	0	33.30	14:06:00
594	AXBT	S	63	31.00	1	3.80	14:10:20
595	AXBT	S	63	14.00	1	38.50	14:15:06
596	AXBT	S	63	.30	2	4.90	14:19:06
597	AXBT	S	62	45.50	2	33.40	14:23:38
598	AXBT	S	62	29.70	3	1.60	14:28:35
599	AXBT	S	62	14.10	3	30.70	14:33:17
600	AXBT	S	61	57.70	4	1.40	14:38:26
601	AXBT	S	61	43.10	3	18.20	14:44:59
602	AXBT	S	61	29.80	2	27.00	14:52:07
604	AXBT	S	61	51.90	1	48.40	14:58:48
605	AXBT	S	62	4.10	1	25.90	15:02:23
606	AXBT	S	62	14.80	1	5.20	15:05:32
607	AXBT	S	62	26.30	0	42.60	15:08:55
608	AXBT	S	62	45.60	0	3.80	15:14:41
609	AXBT	S	62	50.30	0	-6.10	15:16:08
610	AXBT	S	62	58.80	0	-23.80	15:18:46
611	AXBT	S	63	9.20	0	-44.90	15:22:22

613	AXBT	S	63	10.80	-2	-8.30	15:30:58
614	AXBT	S	63	.70	-3	-.10	15:36:15
615	AXBT	S	62	45.10	-2	-27.80	15:41:22
616	AXBT	S	62	32.50	-1	-57.30	15:45:36
617	AXBT	S	62	19.20	-1	-24.70	15:50:10
618	AXBT	S	62	5.50	0	-53.50	15:54:44
619	AXBT	S	61	52.30	0	-22.20	15:59:10
620	AXBT	S	61	37.70	0	8.90	16:03:44
622	AXBT	S	61	23.50	0	38.30	16:08:23
623	AXBT	S	61	12.30	0	59.80	16:12:54
624	AXBT	S	61	5.30	0	.90	16:18:56
625	AXBT	S	61	.30	0	-59.50	16:26:02
626	AXBT	S	61	11.30	-1	-22.70	16:29:32
627	AXBT	S	61	21.50	-1	-46.00	16:32:48
628	AXBT	S	61	31.30	-2	-8.70	16:36:06
629	AXBT	S	61	41.90	-2	-32.60	16:39:26
630	AXBT	S	61	52.60	-2	-57.80	16:42:56
631	AXBT	S	62	1.70	-3	-19.80	16:46:01
632	AXBT	S	62	11.60	-3	-44.40	16:49:21
633	AXBT	S	62	22.30	-4	-9.80	16:52:46
634	AXBT	S	62	31.60	-4	-33.00	16:55:49
635	AXBT	S	62	39.90	-4	-55.00	16:58:47

TOTAL NO. OF PROBES: 70

DATE: 5/30/87 FLIGHT: 8

REGION: NORTHERN NORWEGIAN SEA

#	TYPE	D/S	LATITUDE (DEG MIN)	LONGITUDE (DEG MIN)	TIME (Z)
636	AXBT	S	70 2.70	0 -53.00	11:44:00
637	AXBT	S	70 4.20	0 -24.10	11:45:00
638	AXBT	S	70 .50	1 11.20	11:52:00
639	AXBT	S	70 .30	2 36.40	11:58:00
640	AXBT	S	69 59.50	3 54.80	12:03:00
641	AXBT	S	69 59.50	5 26.60	12:07:00
642	AXBT	S	69 59.80	6 51.80	12:15:00
643	AXBT	S	69 59.70	8 19.80	12:20:00
644	AXBT	S	69 59.90	9 44.30	12:26:00
645	AXBT	S	69 30.00	10 1.70	12:33:00
646	AXBT	S	68 59.90	9 58.90	12:39:00
647	AXBT	S	68 57.00	9 10.40	12:43:00
648	AXBT	S	69 .40	7 47.20	12:49:00
649	AXBT	S	68 59.60	6 22.90	12:55:00
650	AXBT	S	68 59.10	4 58.80	13:00:00
651	AXBT	S	68 59.10	3 32.90	13:06:00
652	AXBT	S	68 59.10	2 11.50	13:11:00

654	AXBT	S	69	.10	0	-38.00	13:22:00
655	AXBT	S	68	59.20	-2	-.30	13:27:00
656	AXBT	S	68	43.40	-2	-16.80	13:31:00
657	AXBT	S	68	1.80	-1	-59.30	13:40:00
658	AXBT	S	68	.00	0	-41.50	13:46:00
659	AXBT	S	67	59.90	0	40.20	13:52:00
660	AXBT	S	67	59.20	2	6.70	13:59:00
661	AXBT	S	68	.20	3	20.10	14:05:00
662	AXBT	S	68	.50	4	39.50	14:11:00
663	AXBT	S	68	.40	5	59.20	14:17:00
664	AXBT	S	67	59.70	7	20.10	14:24:00
665	AXBT	S	67	59.30	8	37.50	14:30:00
666	AXBT	S	67	.20	8	21.90	14:44:00
667	AXBT	S	66	59.40	7	5.70	14:50:00
668	AXBT	S	66	58.90	5	47.70	14:56:00
670	AXBT	S	66	59.40	3	17.70	15:07:00
671	AXBT	S	66	59.80	1	59.80	15:13:00
672	AXBT	S	66	30.30	1	51.30	15:20:00
673	AXBT	S	66	1.60	2	2.60	15:27:00
674	AXBT	S	66	1.00	3	6.10	15:32:00
675	AXBT	S	66	.10	4	19.80	15:39:00
677	AXBT	S	65	59.80	6	46.30	15:52:00
678	AXBT	S	66	.00	7	59.60	15:57:00
679	AXBT	S	65	30.10	7	59.90	16:04:00
680	AXBT	S	65	.40	7	58.90	16:10:00
681	AXBT	S	64	59.30	6	55.60	16:16:00
682	AXBT	S	64	59.90	5	59.20	16:20:00
683	AXBT	S	65	30.00	4	57.50	16:28:00

TOTAL NO. OF PROBES: 45

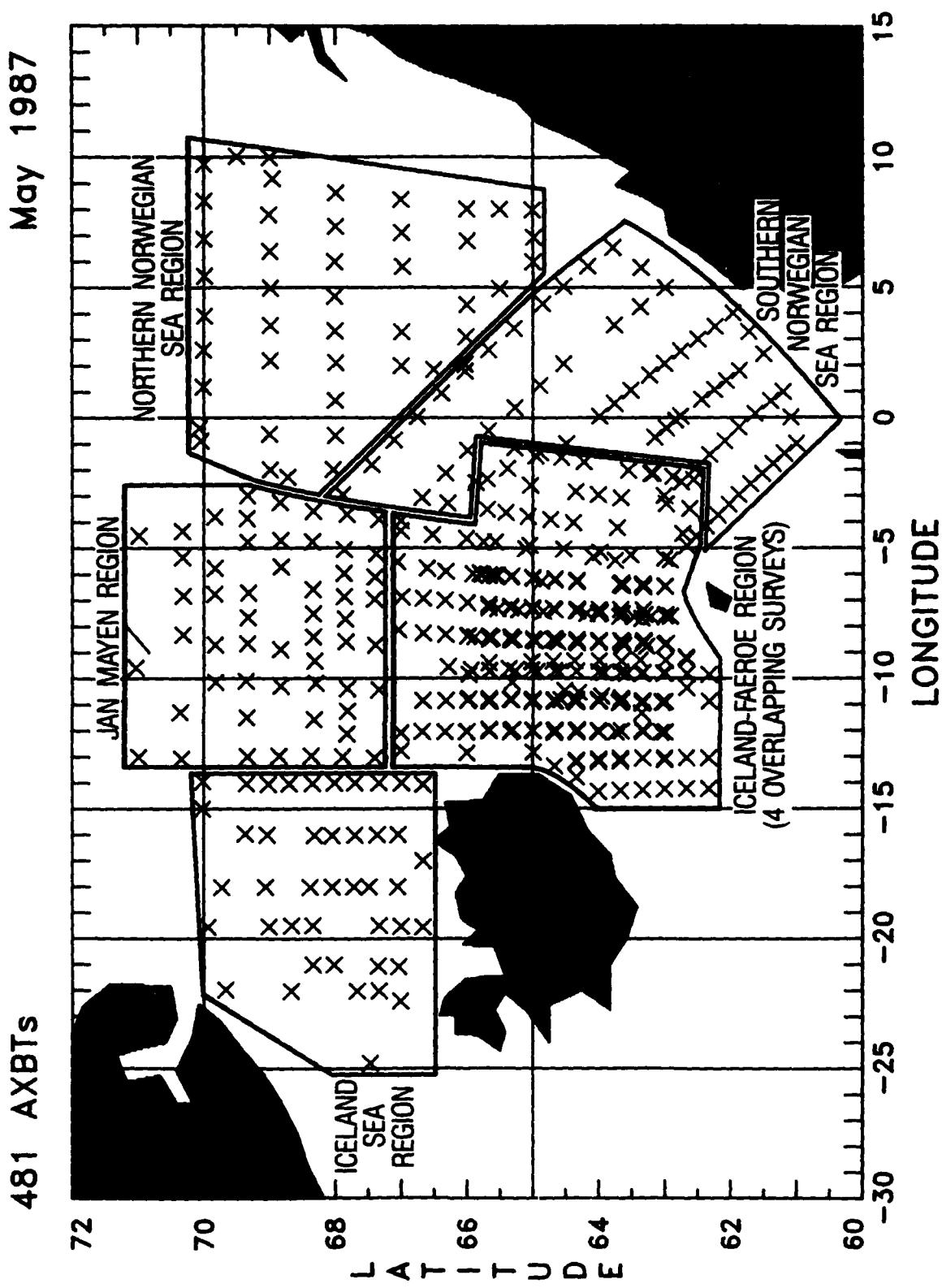


Figure 1. Experimental regions and ensemble of drop positions, Tactical Oceanography Project Prediction Experiment, May 1987.

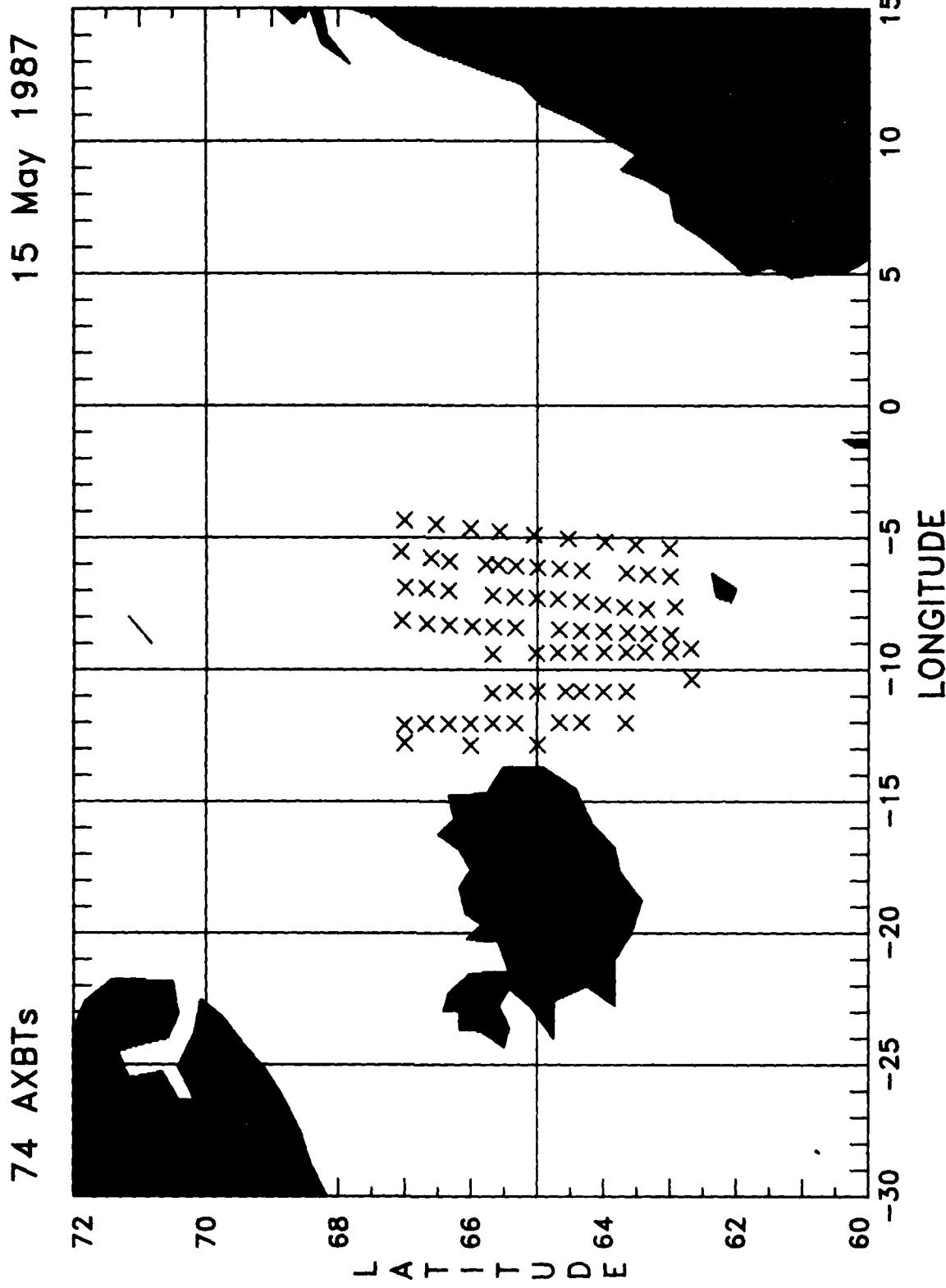


Figure 2. AXBT drop positions, Flight 1, 15 May 1987.

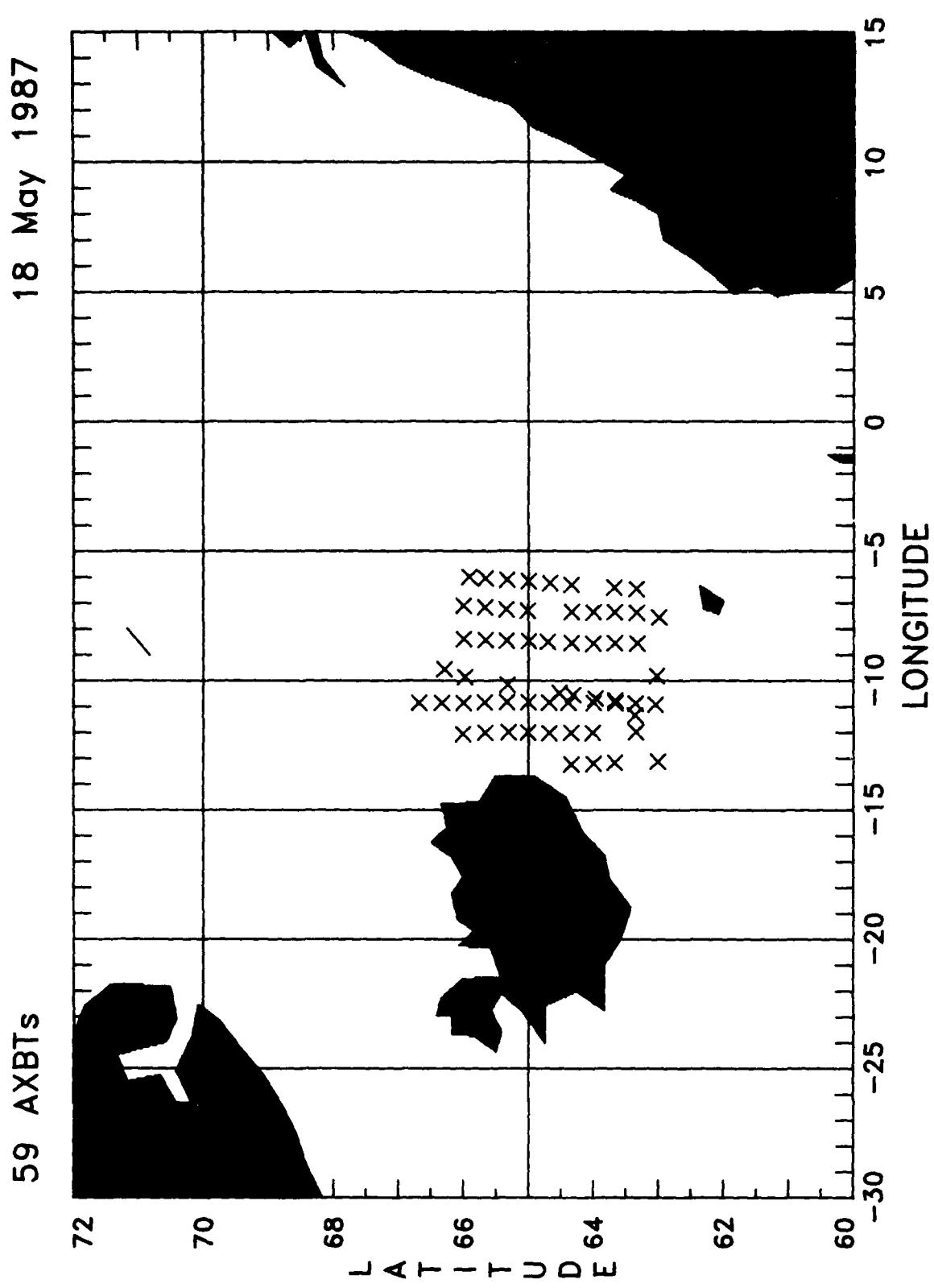


Figure 3. AXBT drop positions, Flight 2, 18 May 1987.

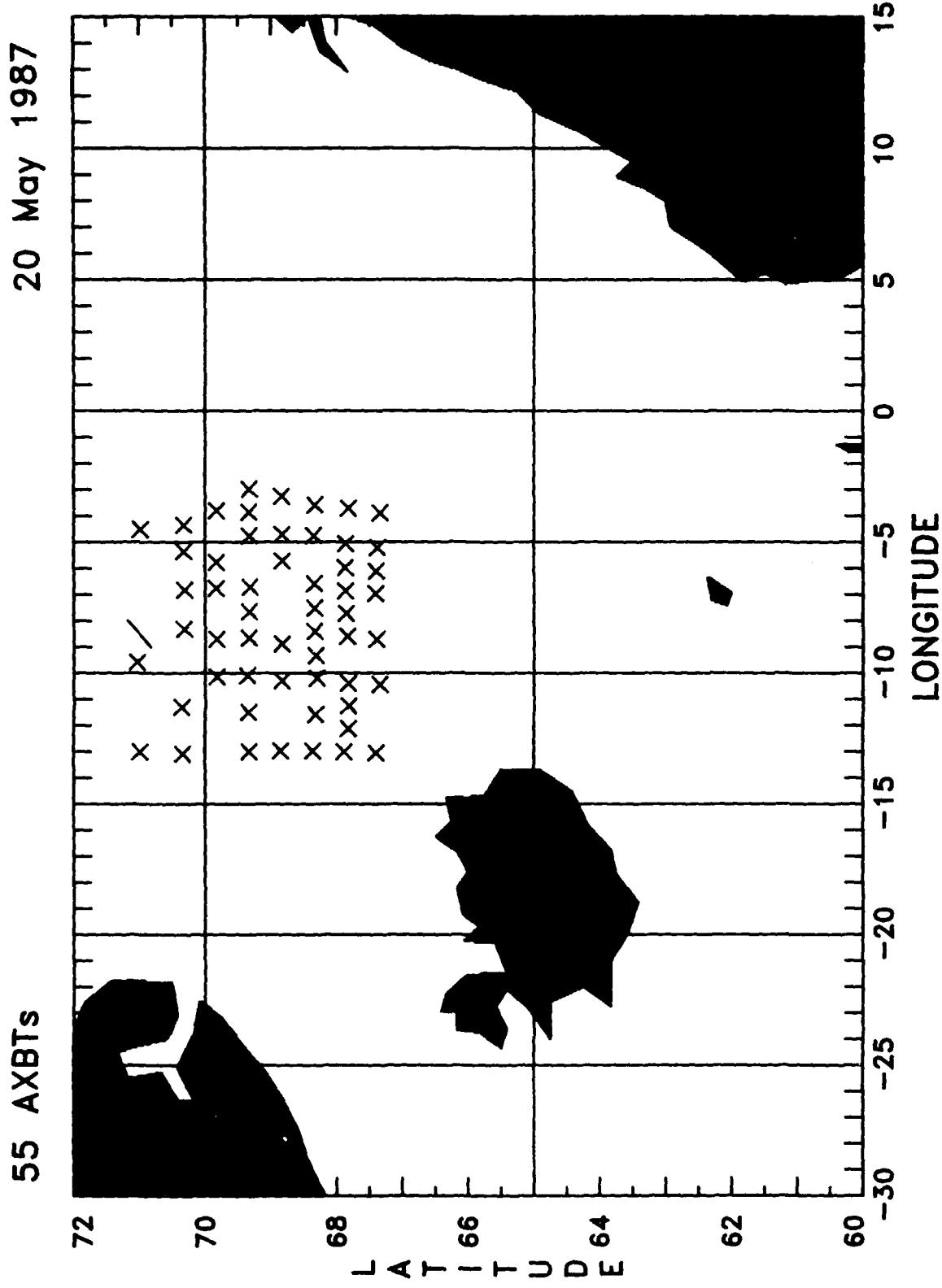


Figure 4. AXBT drop positions, Flight 3, 20 May 1987.

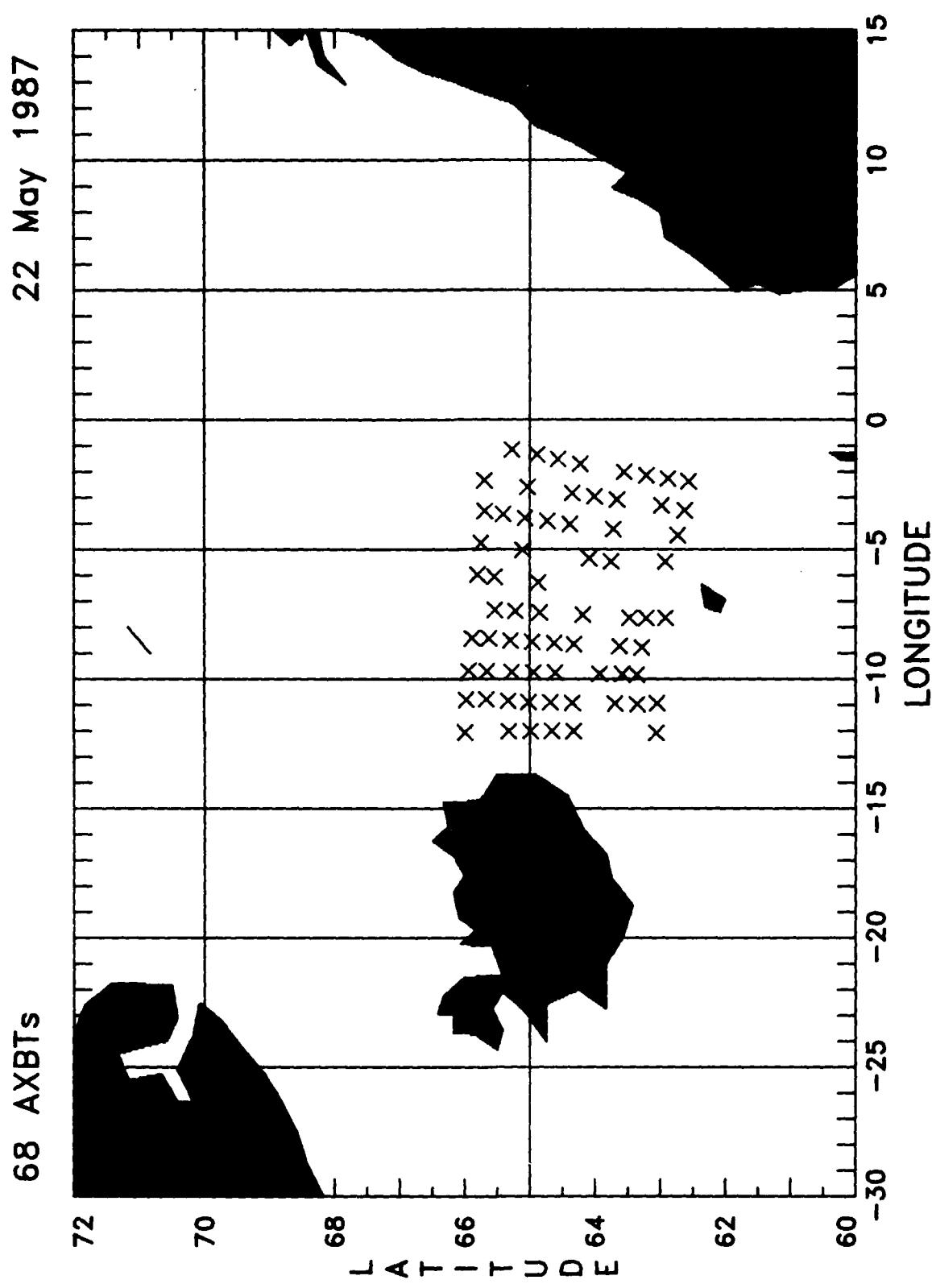


Figure 5. AXBT drop positions, Flight 4, 22 May 1987.

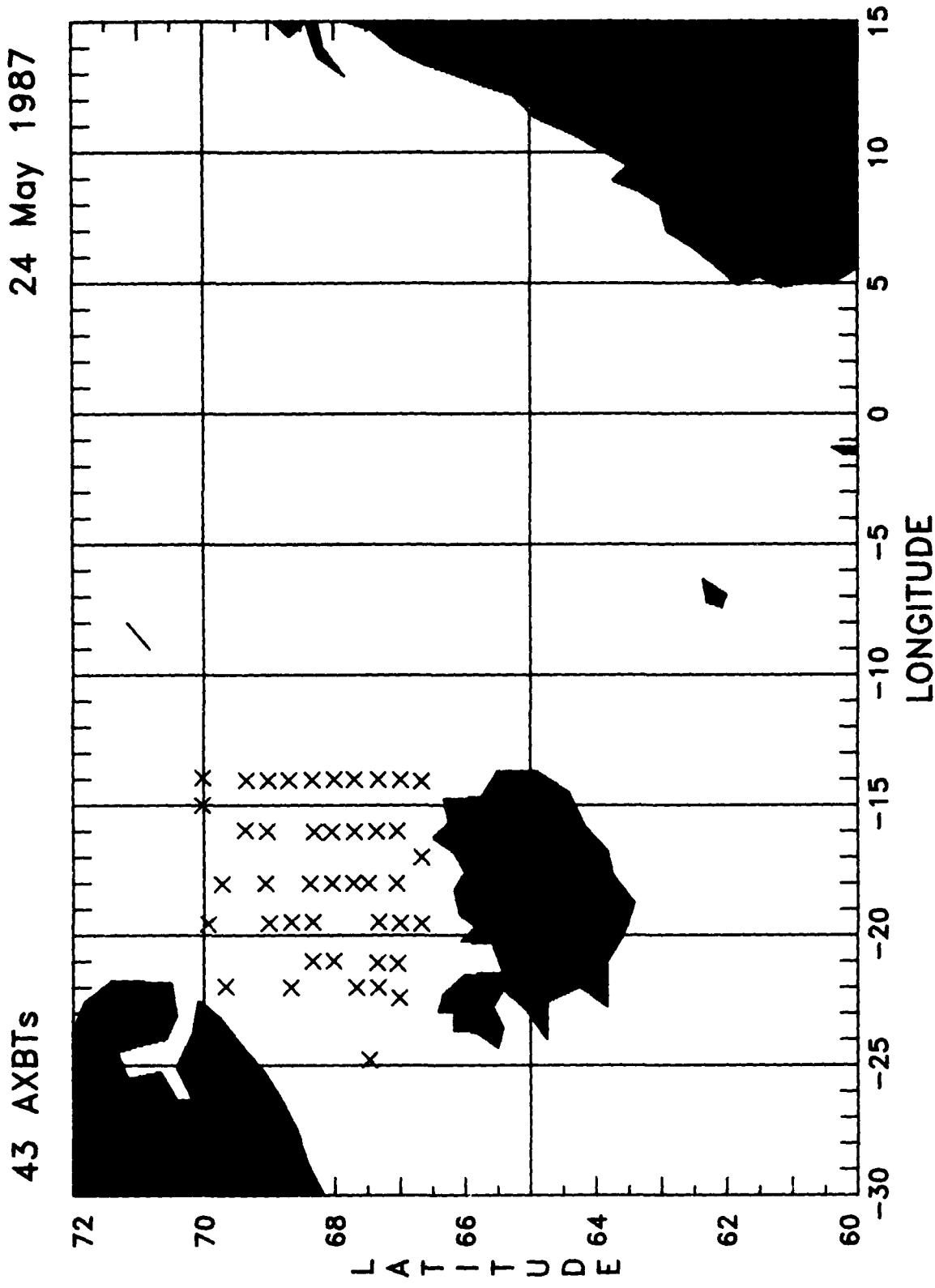


Figure 6. AXBT drop positions, Flight 5, 24 May 1987.

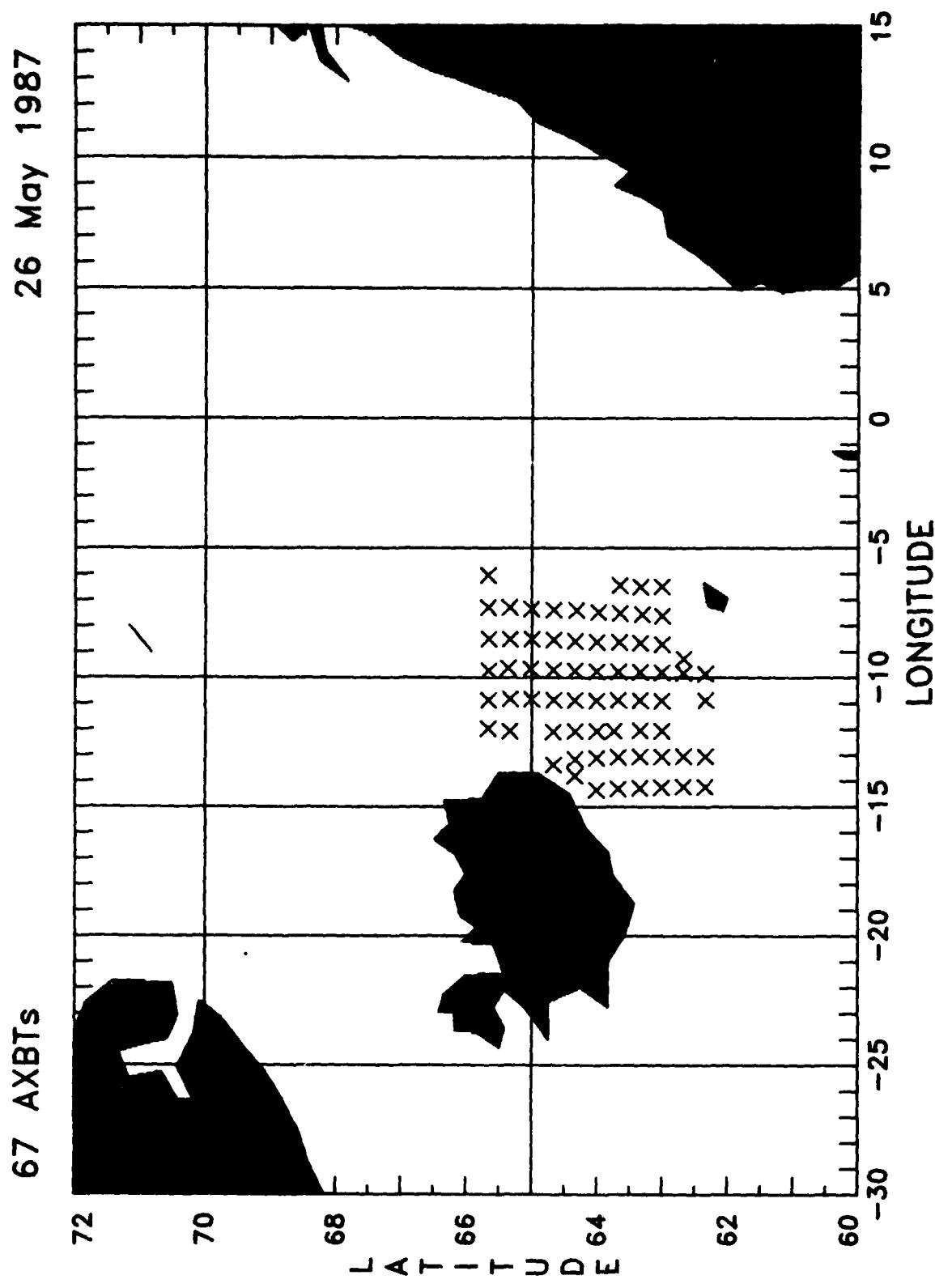


Figure 7. AXBT drop positions, Flight 6, 26 May 1987.

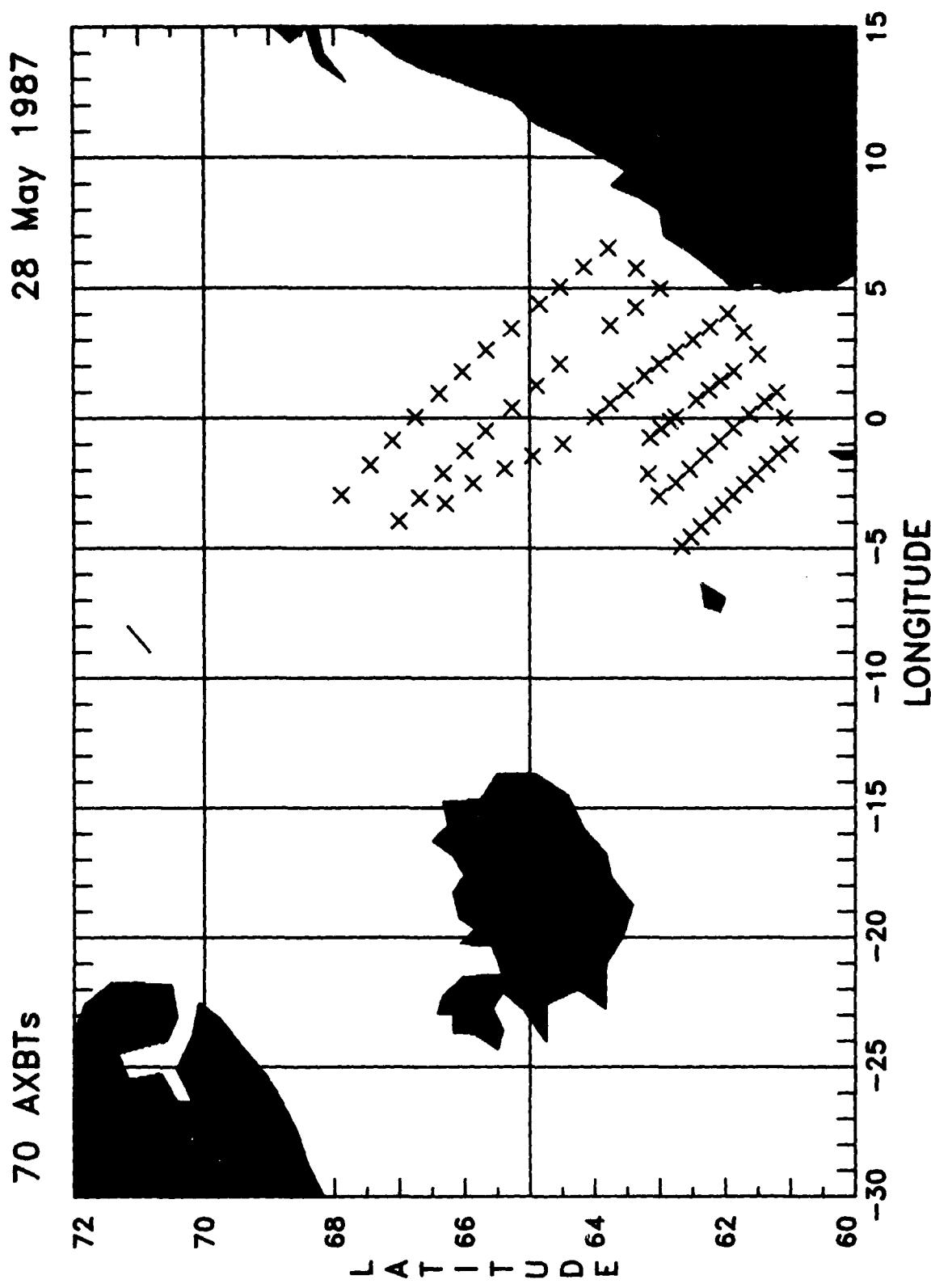


Figure 8. AXBT drop positions, Flight 7, 28 May 1987.

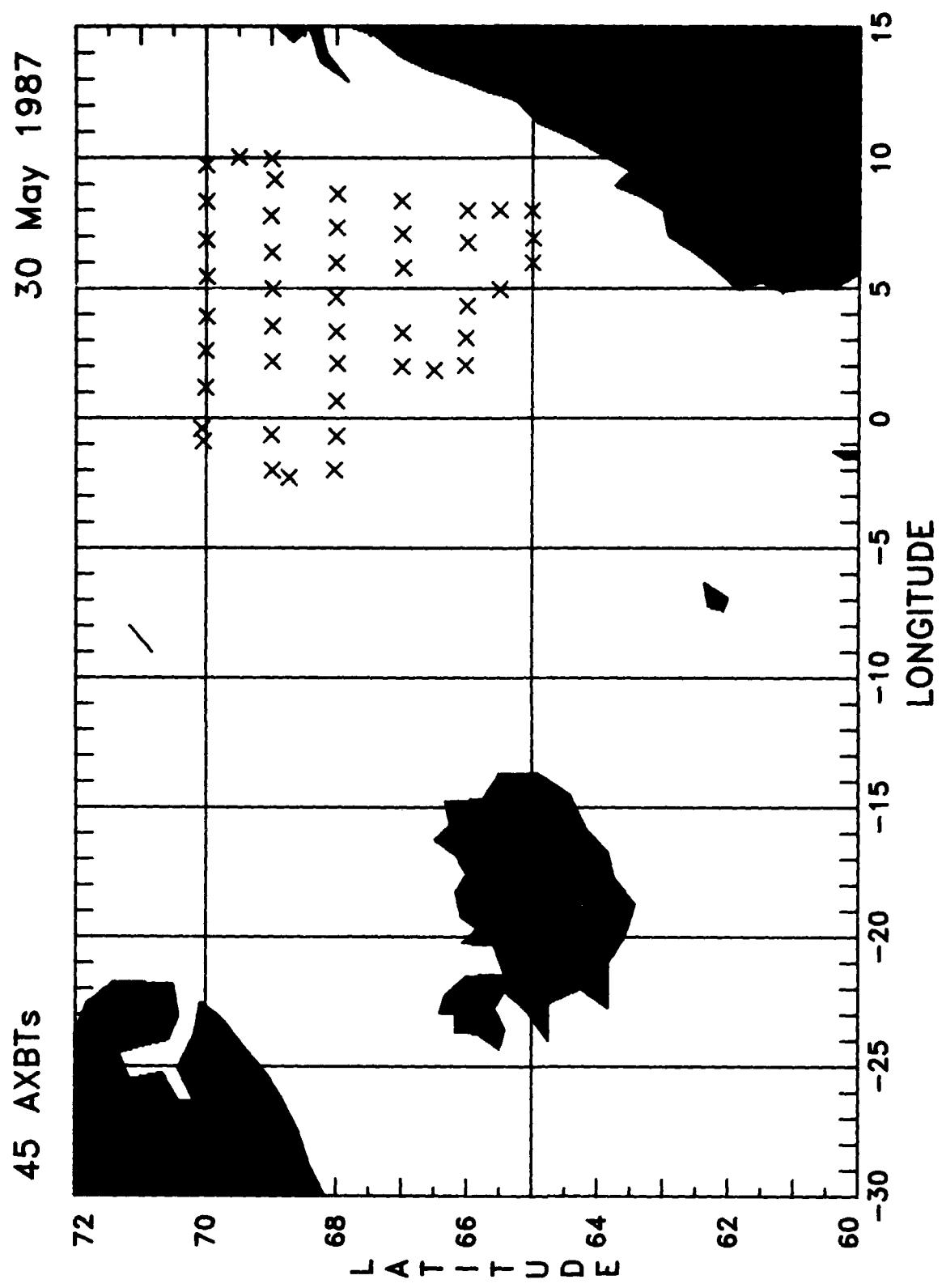


Figure 9. AXBT drop positions, Flight 8, 30 May 1987.

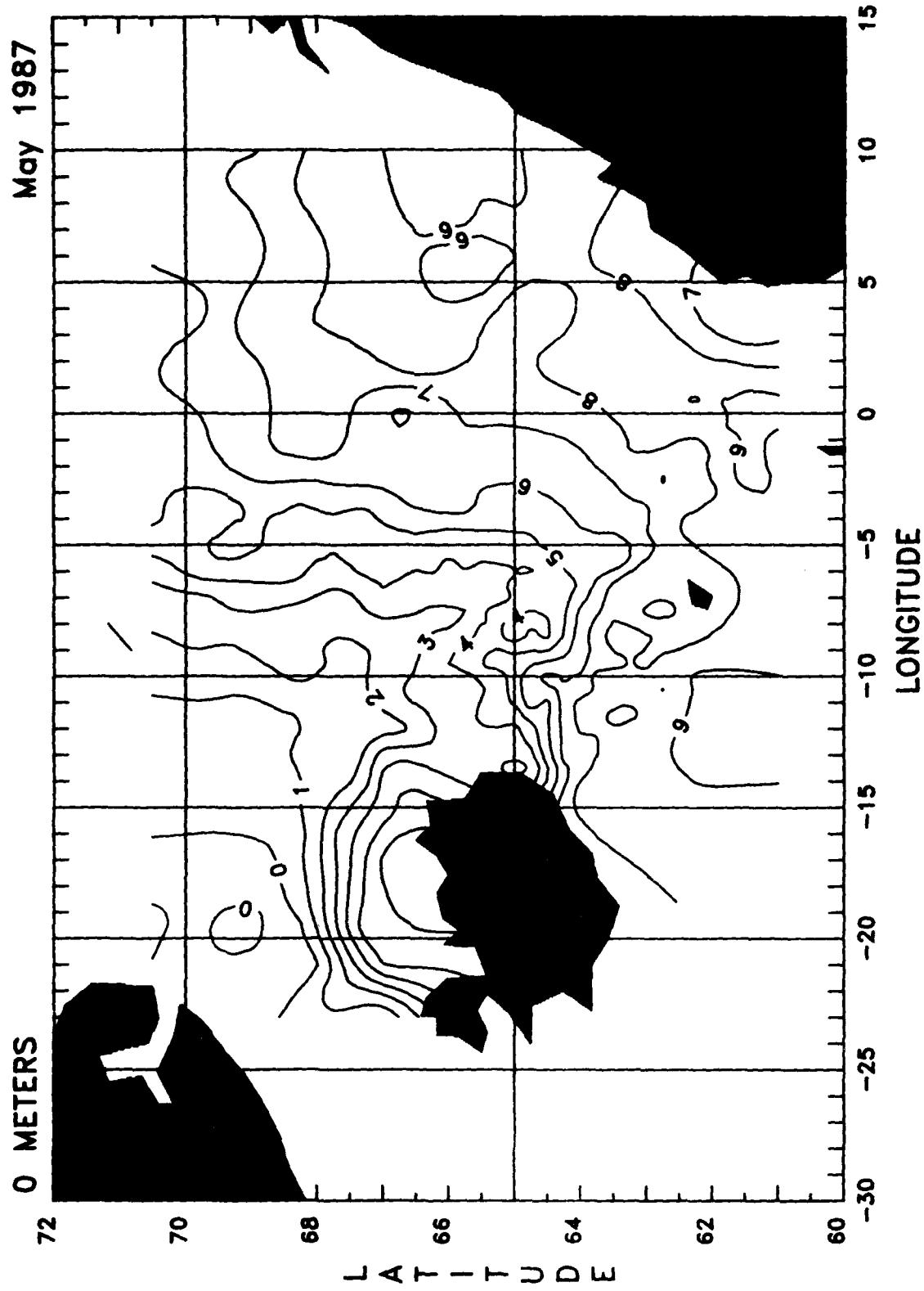


Figure 10. Temperature ($^{\circ}\text{C}$) at 0 m, all flights, May 1987.

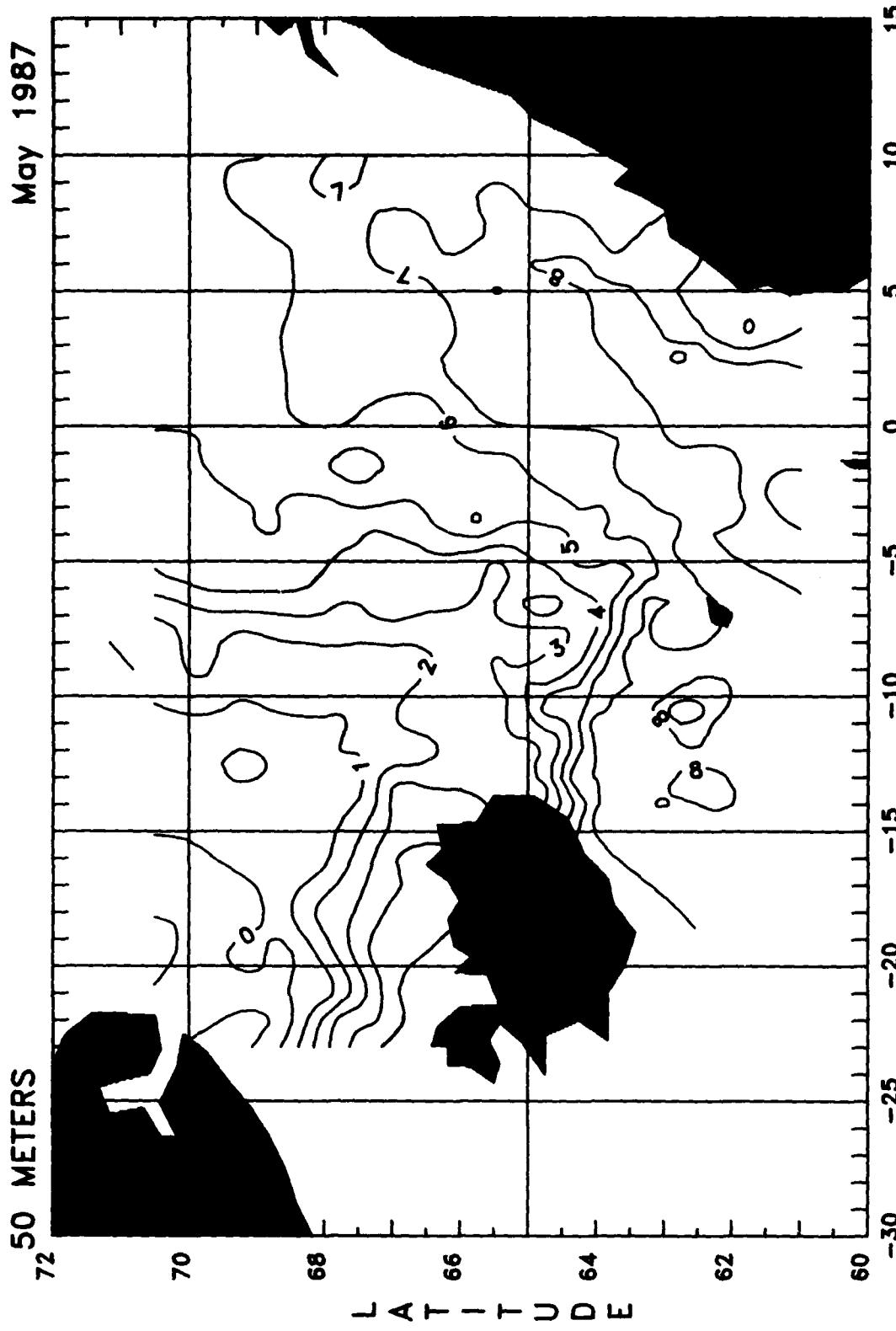


Figure 11. Temperature ($^{\circ}\text{C}$) at 50 m, all flights, May 1987.

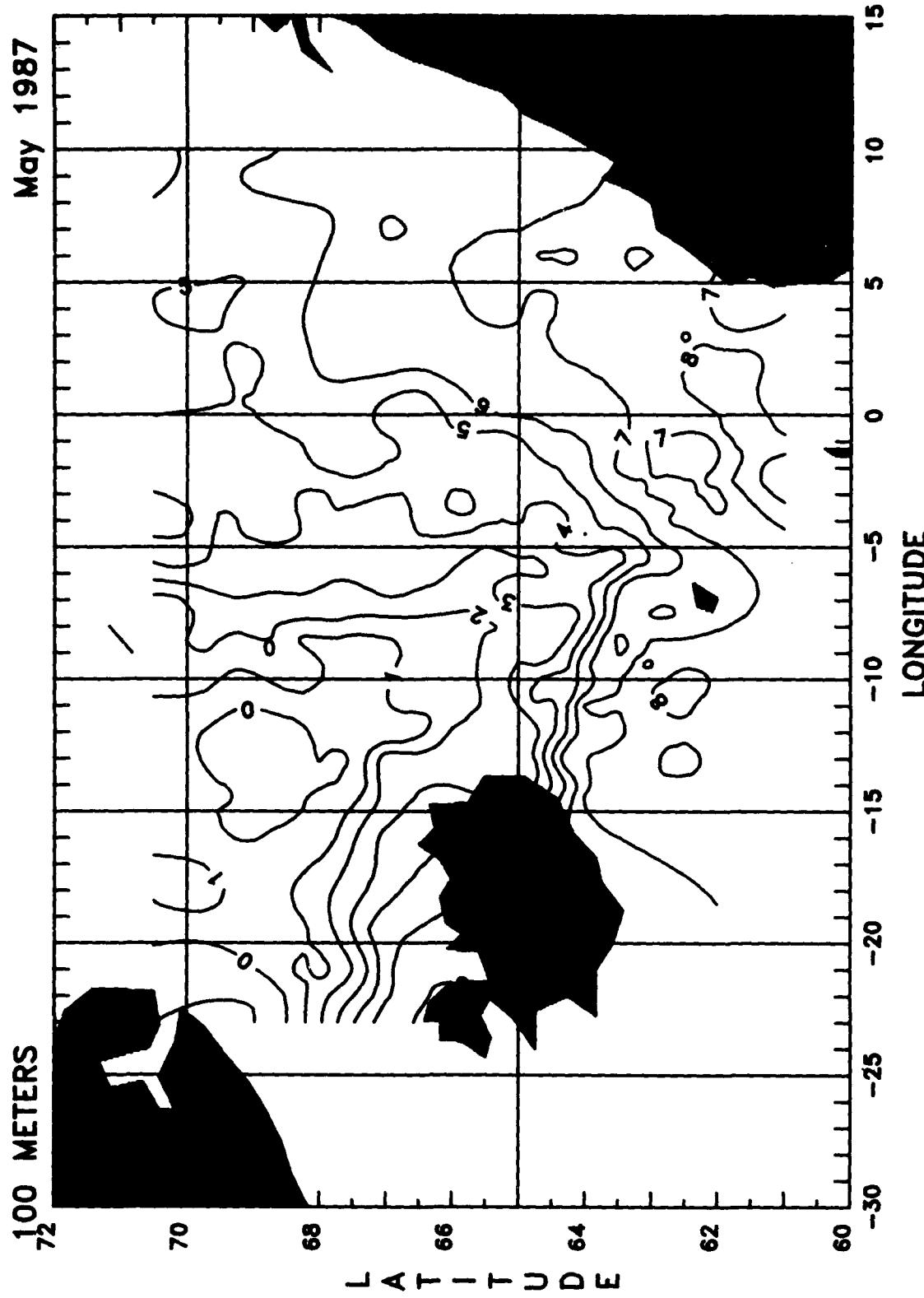


Figure 12. Temperature ($^{\circ}\text{C}$) at 100 m, all flights, May 1987.

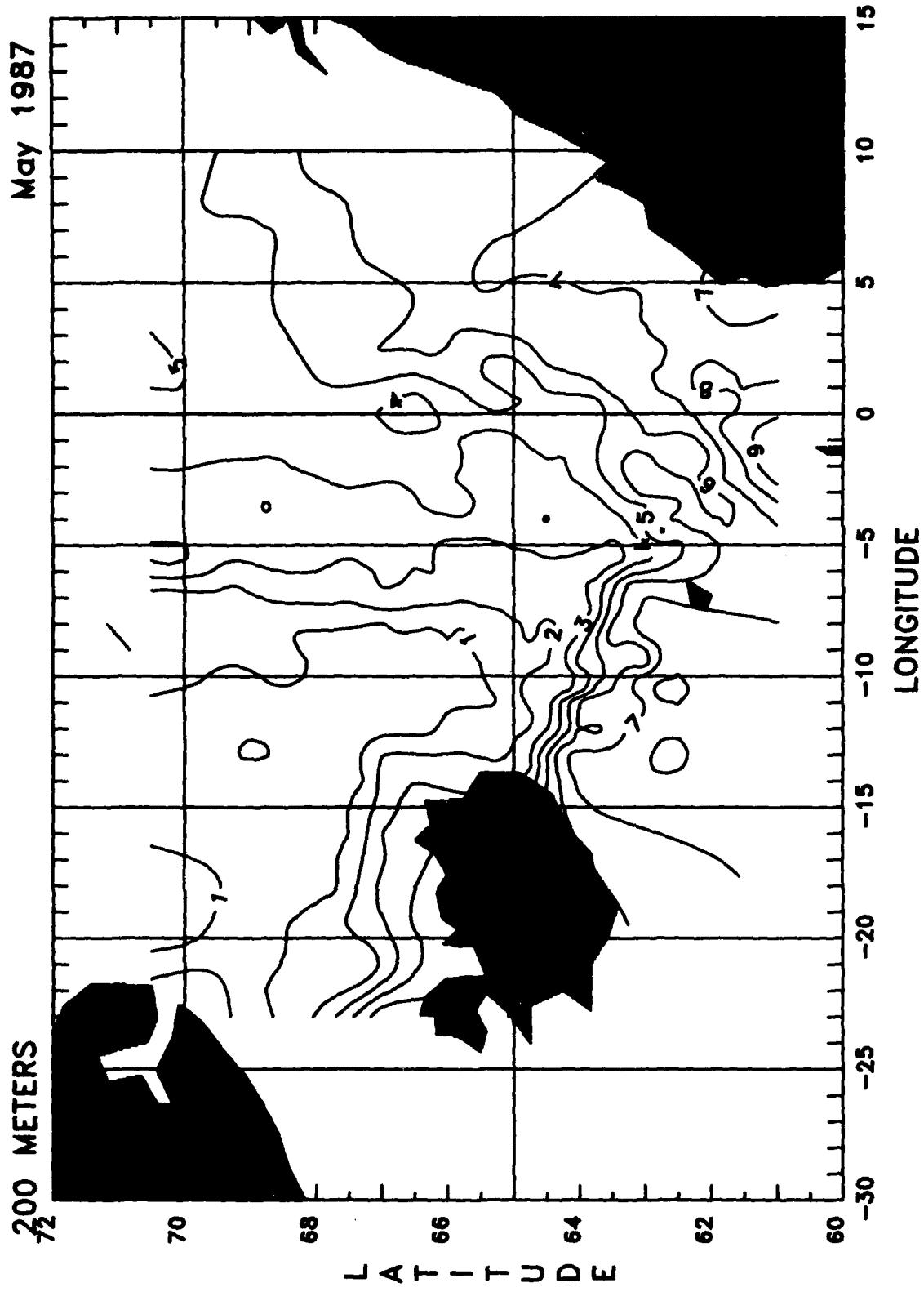


Figure 13. Temperature ($^{\circ}\text{C}$) at 200 m, all flights, May 1987.

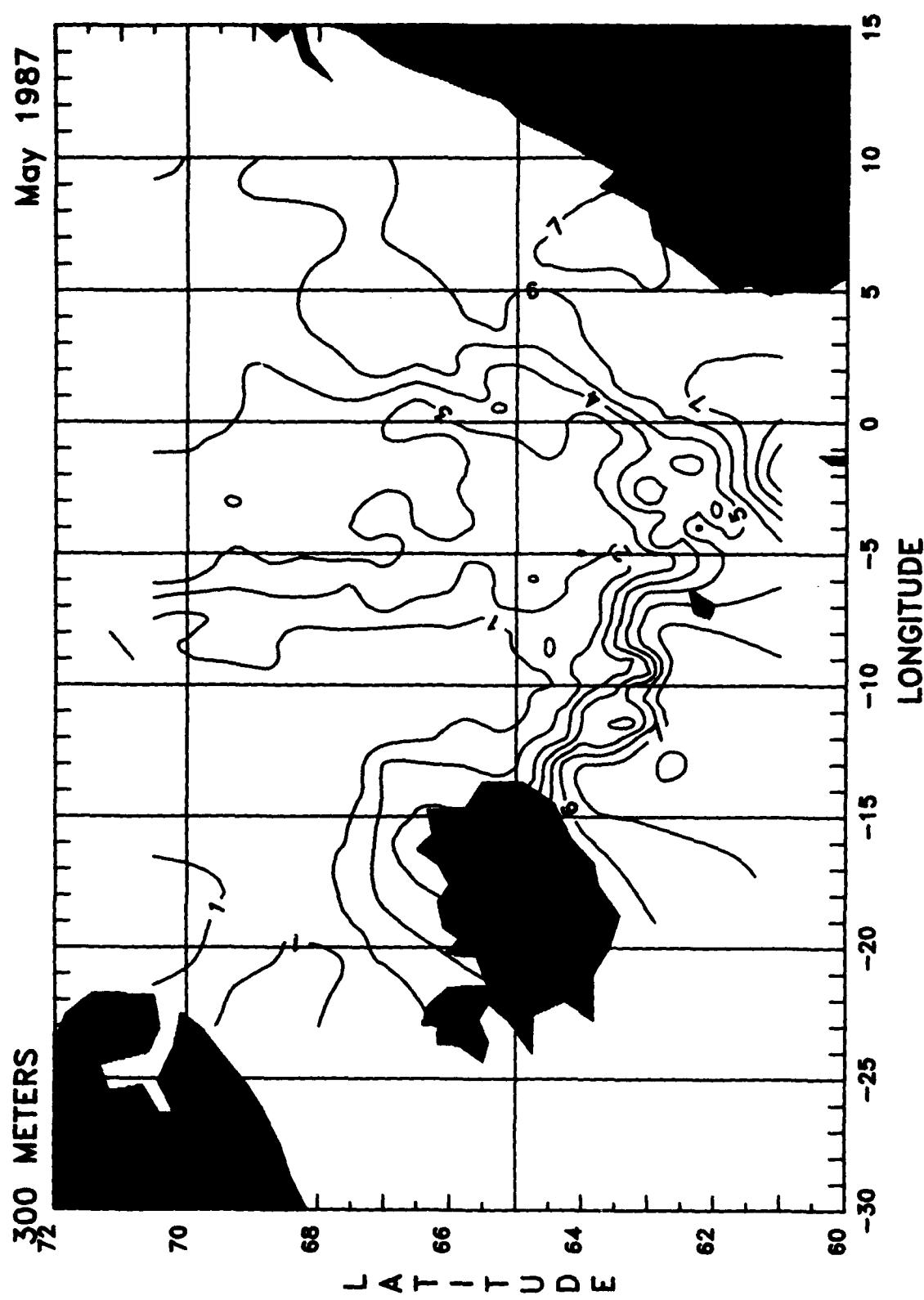


Figure 14. Temperature ($^{\circ}\text{C}$) at 300 m, all flights, May 1987.

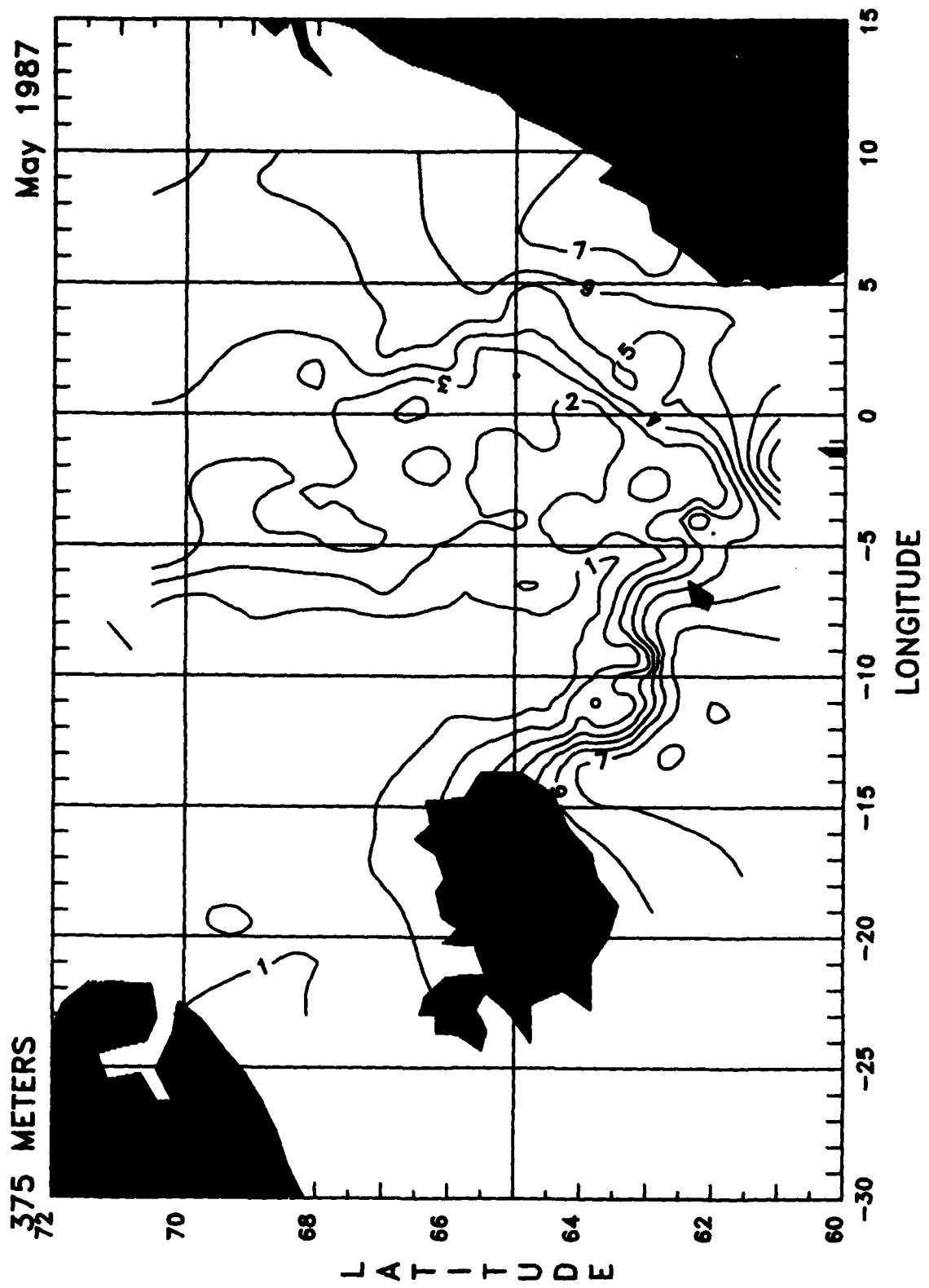
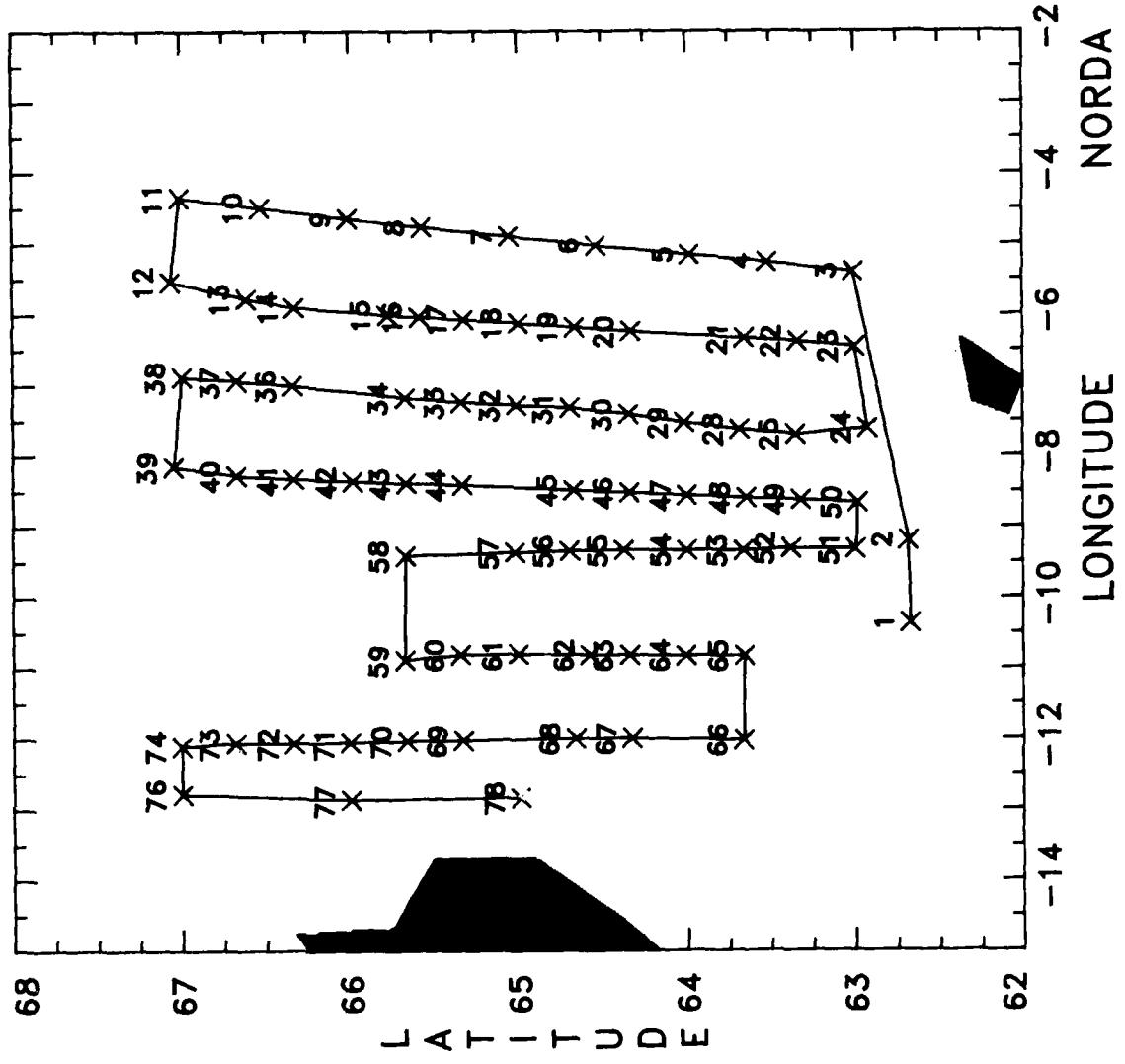


Figure 15. Temperature ($^{\circ}\text{C}$) at 375 m, all flights, May 1987.

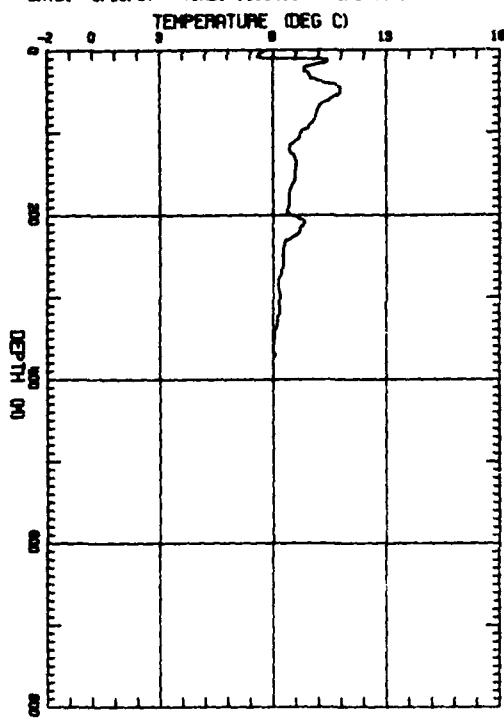
Appendix A.
Drop Positions and Data Profiles, Flight 1,
15 May 1987, Iceland-Faeroe Frontal Region.

74 AXBTs

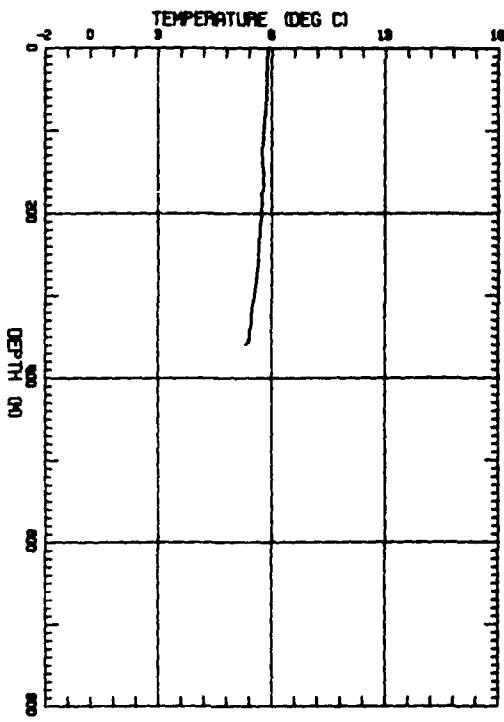
15 May 1987



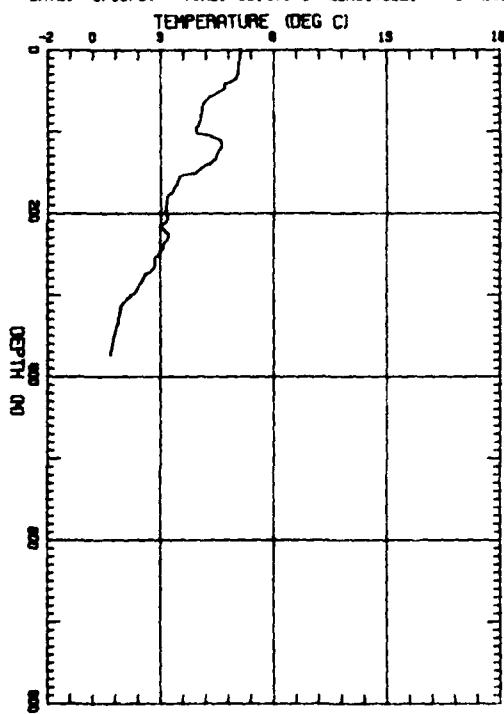
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 1 CHANNEL: 18 LATITUDE: 62 40.2
DATE: 5/15/87 TIME: 10:18:39 LONGITUDE: -10 22.1



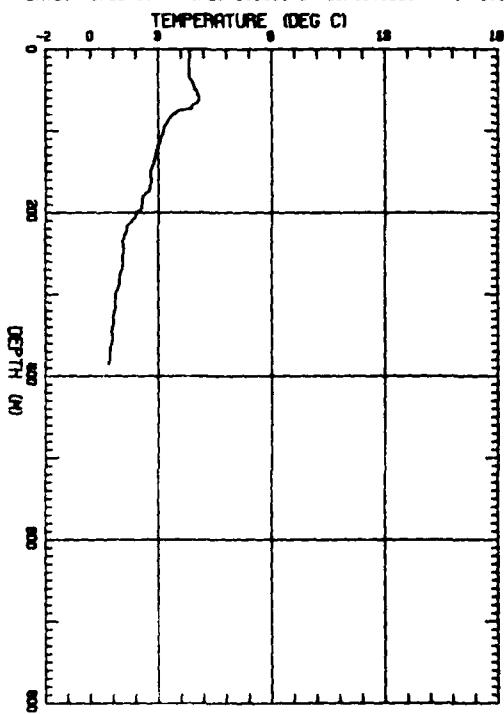
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 2 CHANNEL: 12 LATITUDE: 62 40.8
DATE: 5/15/87 TIME: 10:18:38 LONGITUDE: -9 11.6



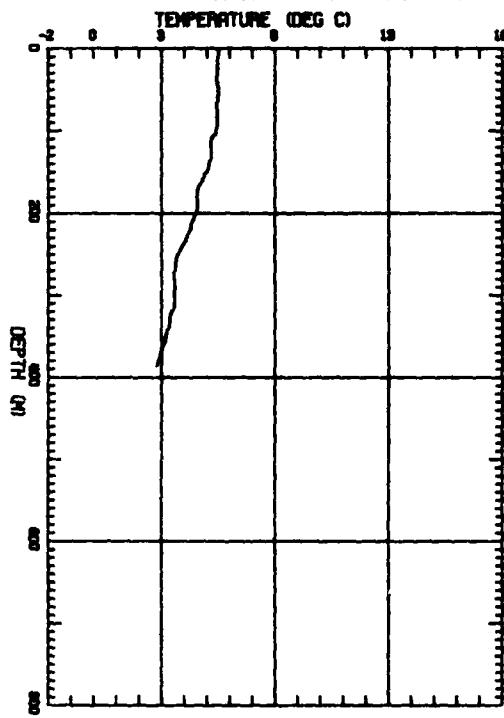
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 3 CHANNEL: 14 LATITUDE: 63 31.3
DATE: 5/15/87 TIME: 10:47:0 LONGITUDE: -5 24.1



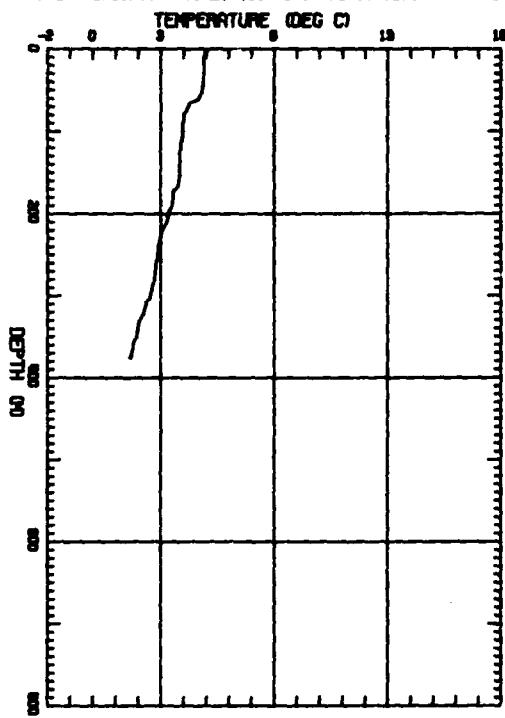
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 4 CHANNEL: 16 LATITUDE: 63 31.0
DATE: 5/15/87 TIME: 10:53:0 LONGITUDE: -5 16.0



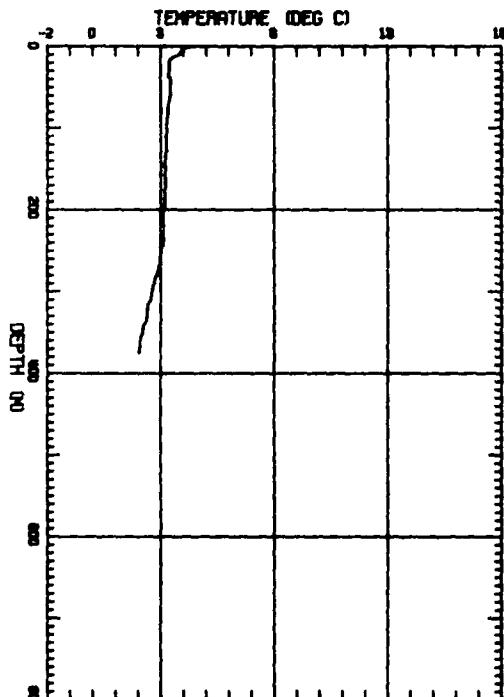
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 5 CHANNEL: 12 LATITUDE: 85 58.7
DATE: 5/15/87 TIME: 11:11:0 LONGITUDE: -5 -9.8



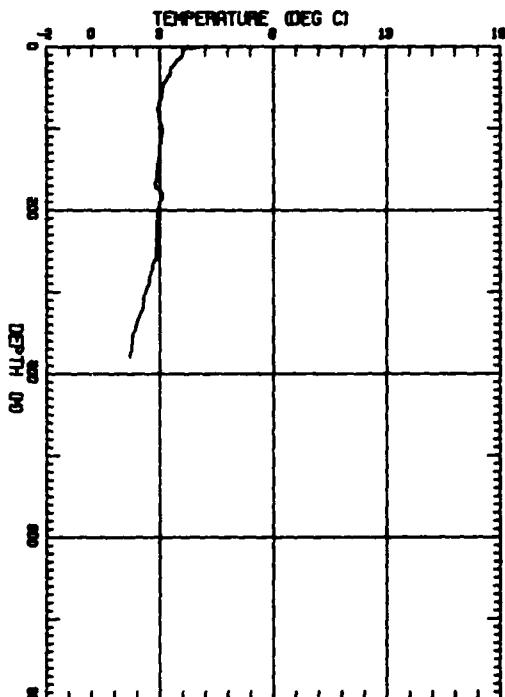
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 6 CHANNEL: 14 LATITUDE: 85 32.0
DATE: 5/15/87 TIME: 11:17:0 LONGITUDE: -5 -2.0



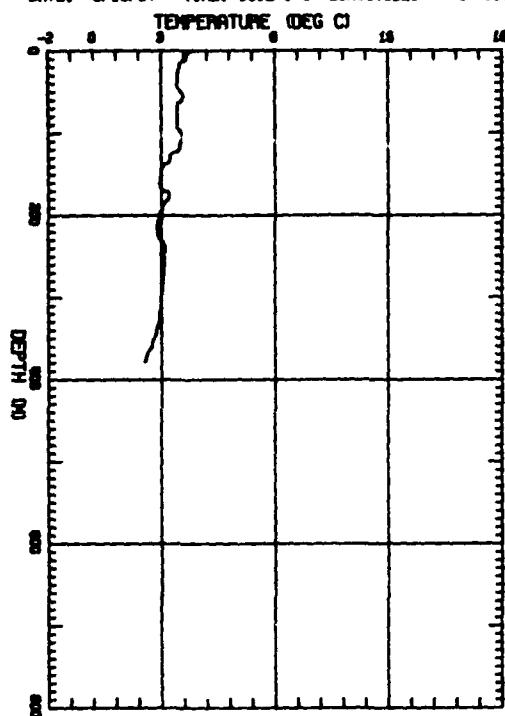
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 7 CHANNEL: 16 LATITUDE: 85 2.0
DATE: 5/15/87 TIME: 11:15:0 LONGITUDE: -4 -53.6



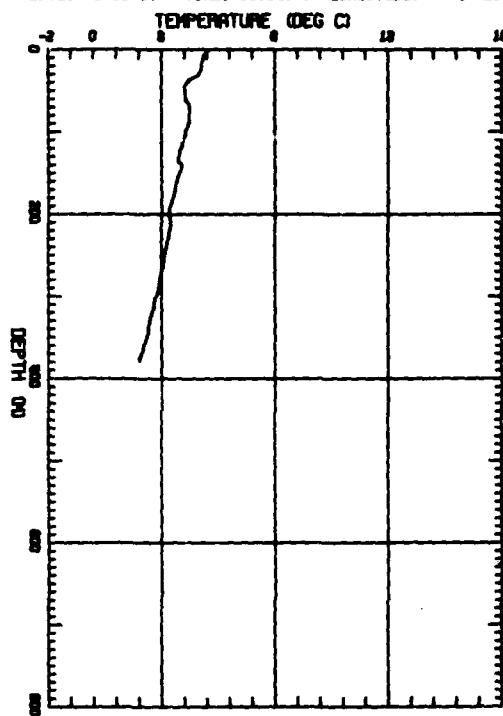
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 8 CHANNEL: 12 LATITUDE: 85 34.0
DATE: 5/15/87 TIME: 11:21:0 LONGITUDE: -4 -45.6



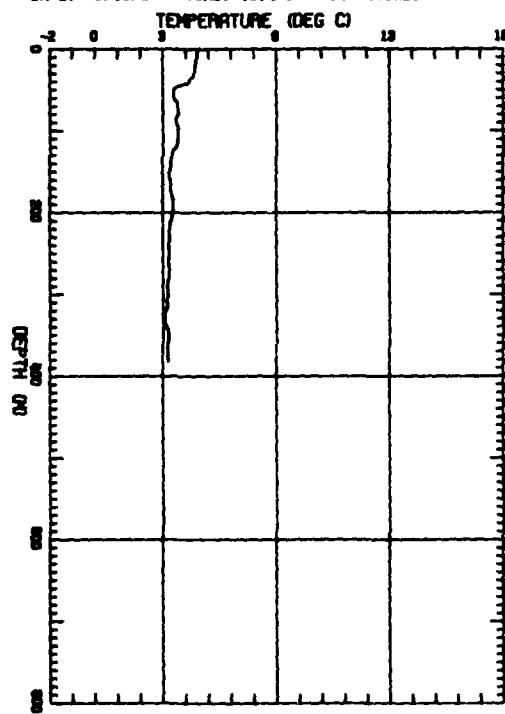
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 9 CHANNEL: 16 LATITUDE: 66 .4
DATE: 5/15/87 TIME: 11:27:0 LONGITUDE: -4 -36.7



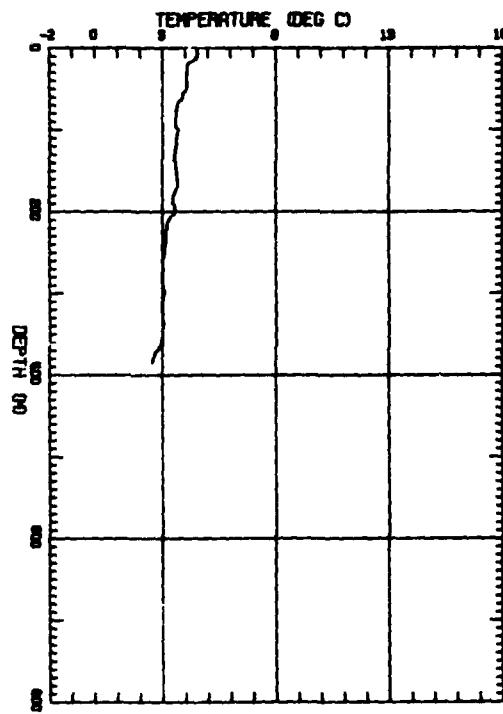
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 10 CHANNEL: 16 LATITUDE: 66 31.6
DATE: 5/15/87 TIME: 11:36:0 LONGITUDE: -4 -29.4



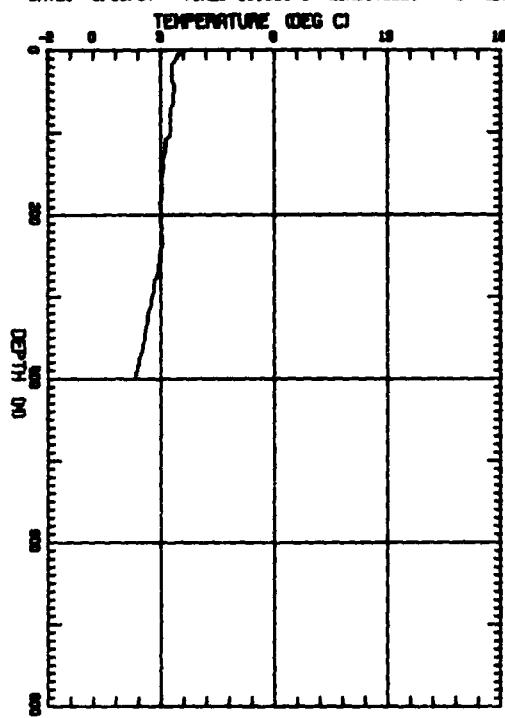
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 11 CHANNEL: 12 LATITUDE: 67 .3
DATE: 5/15/87 TIME: 11:40:0 LONGITUDE: -4 -20.9



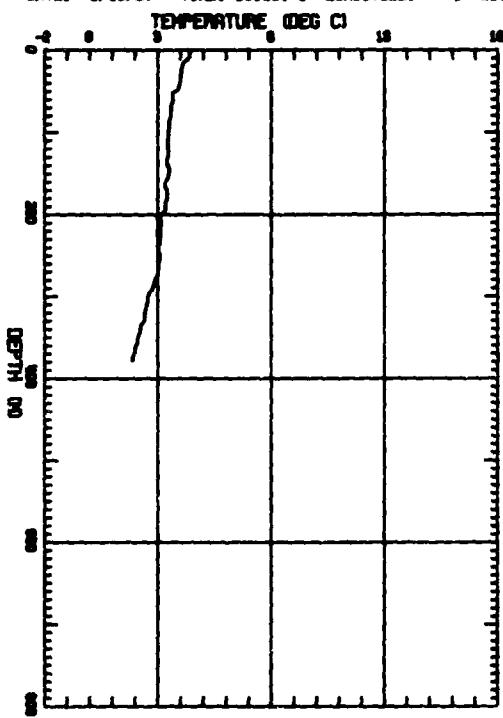
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 12 CHANNEL: 14 LATITUDE: 67 3.5
DATE: 5/15/87 TIME: 11:46:0 LONGITUDE: -5 -32.1



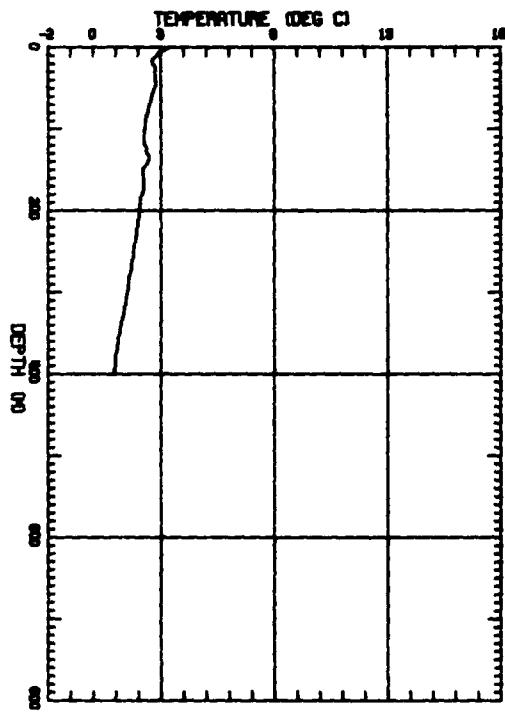
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 13 CHANNEL: 18 LATITUDE: 06 36.5
DATE: 5/15/87 TIME: 11:51:0 LONGITUDE: -6 -46.7



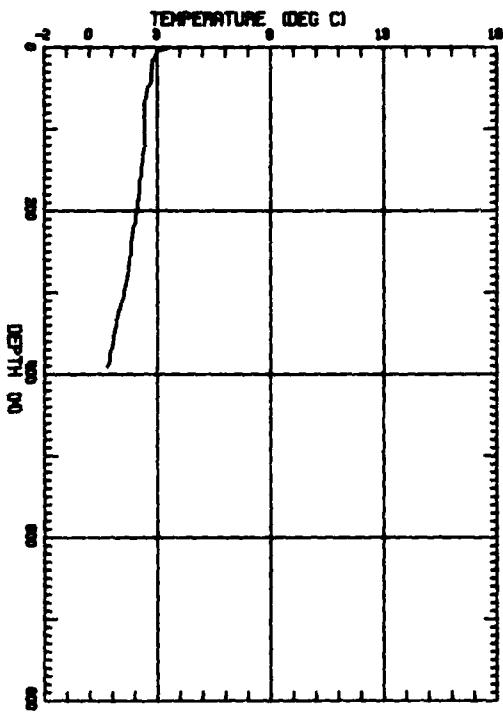
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 14 CHANNEL: 12 LATITUDE: 06 10.5
DATE: 5/15/87 TIME: 11:56:0 LONGITUDE: -6 -33.6



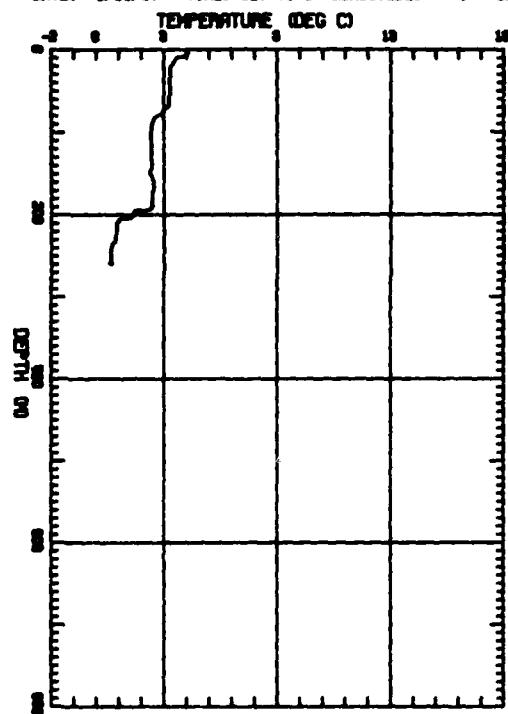
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 15 CHANNEL: 14 LATITUDE: 06 36.4
DATE: 5/15/87 TIME: 12:11:0 LONGITUDE: -6 -8.6



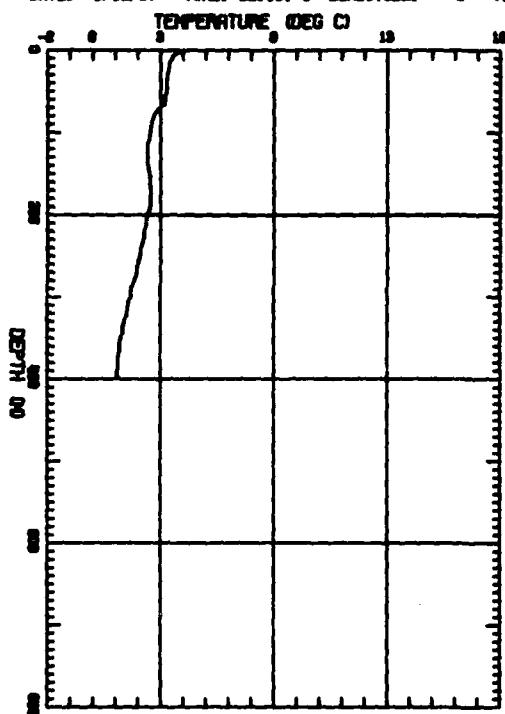
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 16 CHANNEL: 16 LATITUDE: 06 35.1
DATE: 5/15/87 TIME: 12:34:0 LONGITUDE: -6 -2.1



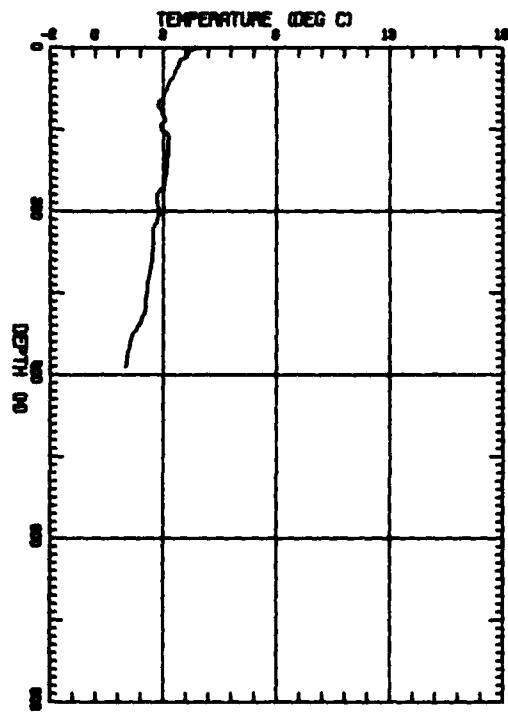
PROJECT: TACTICAL SCINEROMETER
DROP NO: 17 CHANNEL: 12 LATITUDE: 06 18.2
DATE: 5/15/87 TIME: 12:17:0 LONGITUDE: -6 -4.5



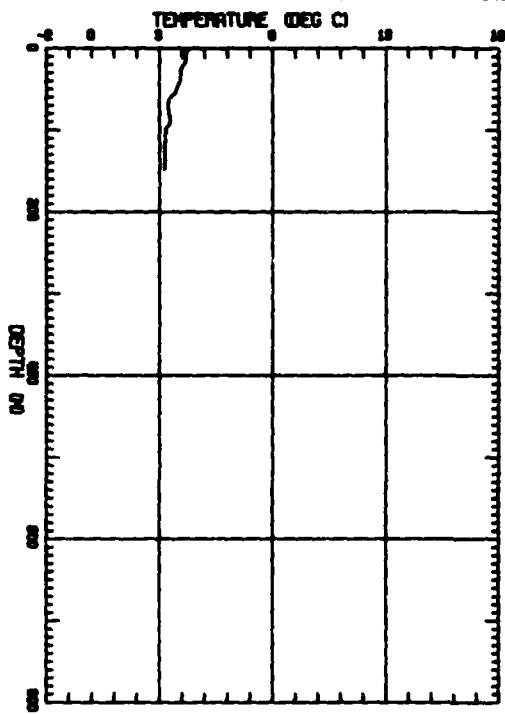
PROJECT: TACTICAL SCINEROMETER
DROP NO: 18 CHANNEL: 16 LATITUDE: 06 18.7
DATE: 5/15/87 TIME: 12:10:0 LONGITUDE: -6 -7.7



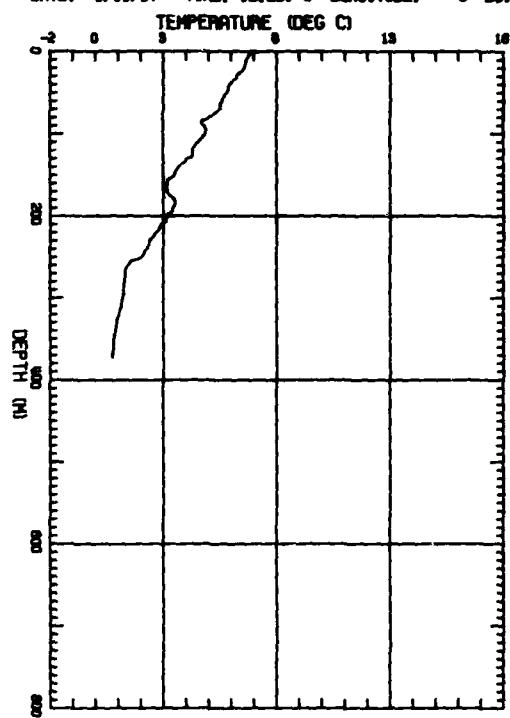
PROJECT: TACTICAL SCINEROMETER
DROP NO: 19 CHANNEL: 16 LATITUDE: 06 18.7
DATE: 5/15/87 TIME: 12:14:0 LONGITUDE: -6 -11.1



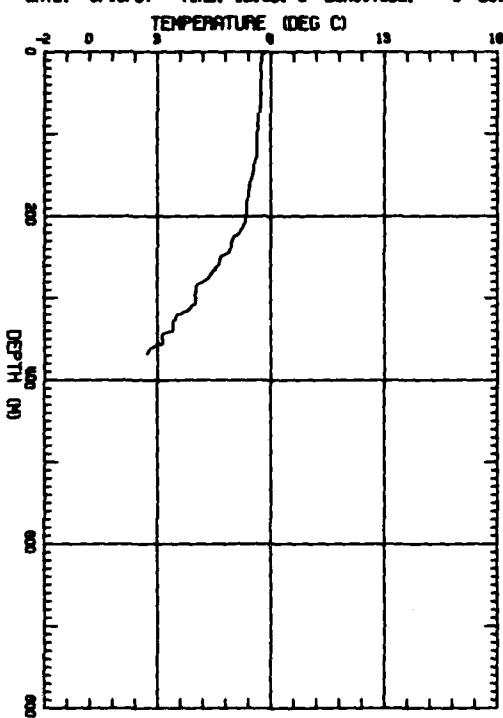
PROJECT: TACTICAL SCINEROMETER
DROP NO: 20 CHANNEL: 12 LATITUDE: 06 18.7
DATE: 5/15/87 TIME: 12:17:0 LONGITUDE: -6 -14.5



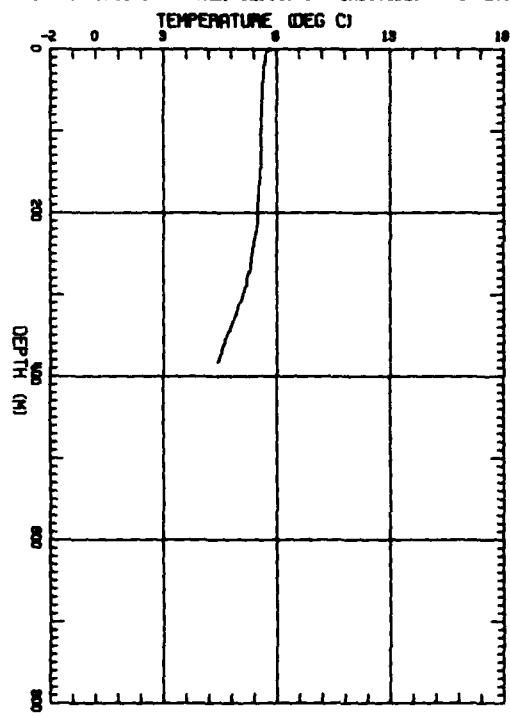
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 21 CHANNEL: 16 LATITUDE: 63 39.2
DATE: 5/15/87 TIME: 12:28:0 LONGITUDE: -6 20.4



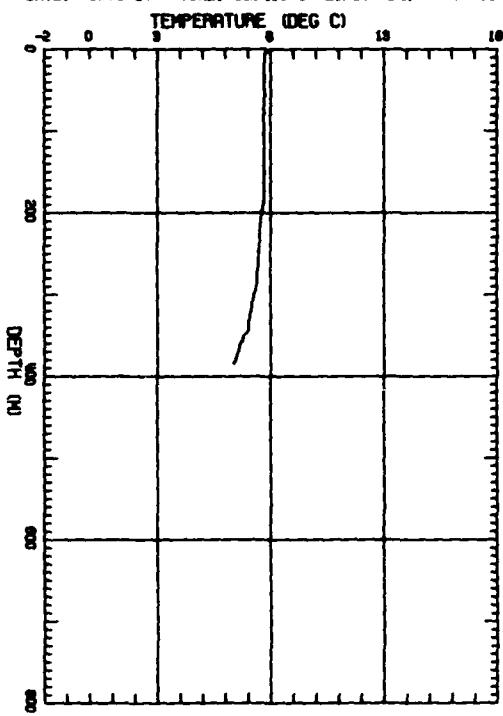
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 22 CHANNEL: 12 LATITUDE: 63 20.2
DATE: 5/15/87 TIME: 12:30:0 LONGITUDE: -6 23.1



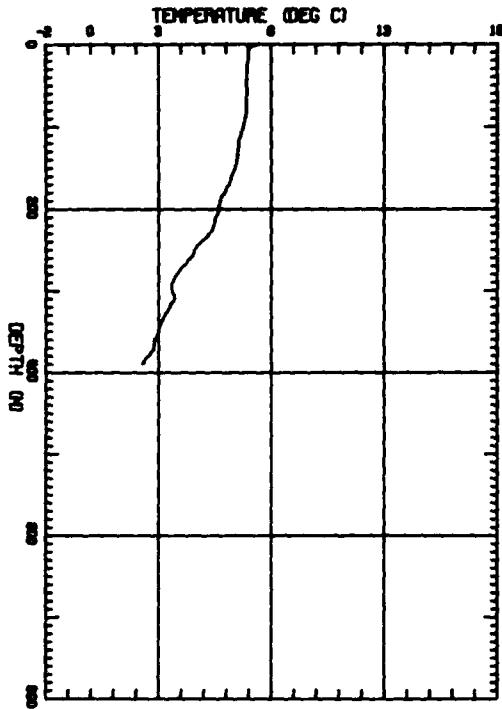
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 23 CHANNEL: 14 LATITUDE: 62 58.6
DATE: 5/15/87 TIME: 12:34:0 LONGITUDE: -6 27.6



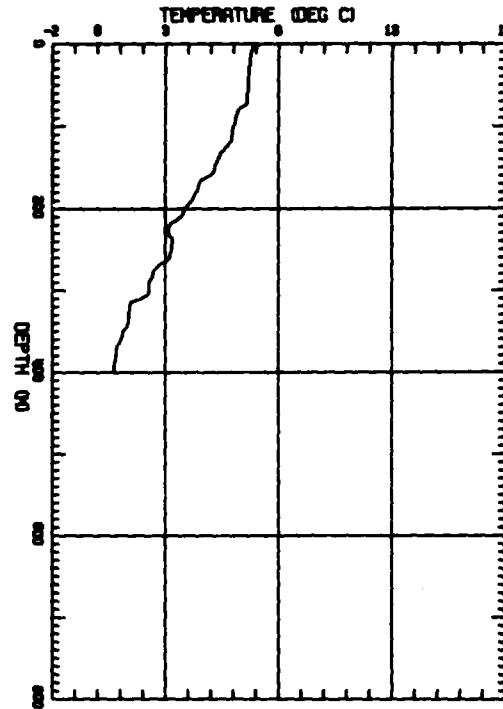
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 24 CHANNEL: 16 LATITUDE: 62 55.3
DATE: 5/15/87 TIME: 12:41:0 LONGITUDE: -7 36.6



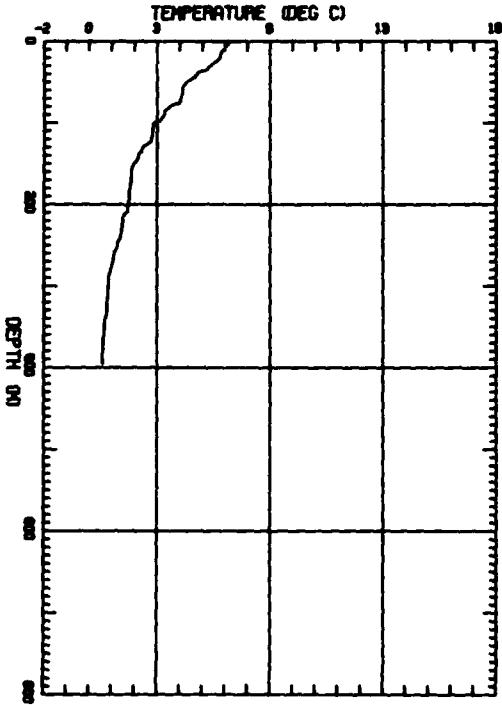
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 25 CHANNEL: 12 LATITUDE: 63 20.6
DATE: 5/15/87 TIME: 12:47:0 LONGITUDE: -7 42.2



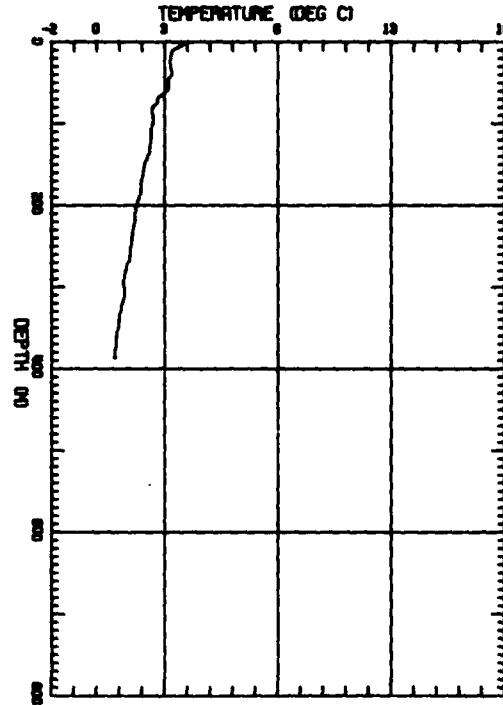
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 26 CHANNEL: 16 LATITUDE: 63 40.6
DATE: 5/15/87 TIME: 12:52:0 LONGITUDE: -7 37.6



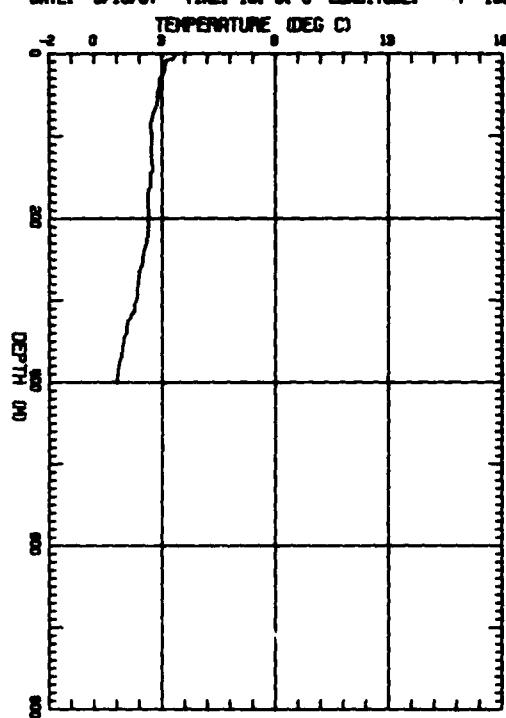
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 28 CHANNEL: 16 LATITUDE: 64 .6
DATE: 5/15/87 TIME: 12:58:0 LONGITUDE: -7 31.6



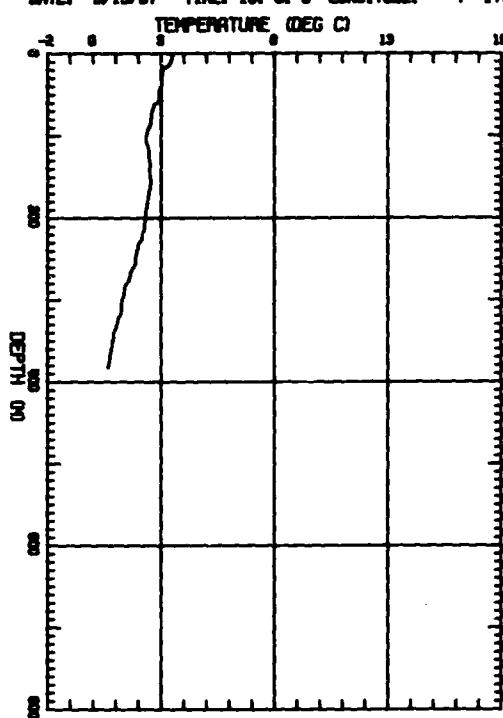
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 30 CHANNEL: 12 LATITUDE: 64 20.6
DATE: 5/15/87 TIME: 13:04:0 LONGITUDE: -7 24.6



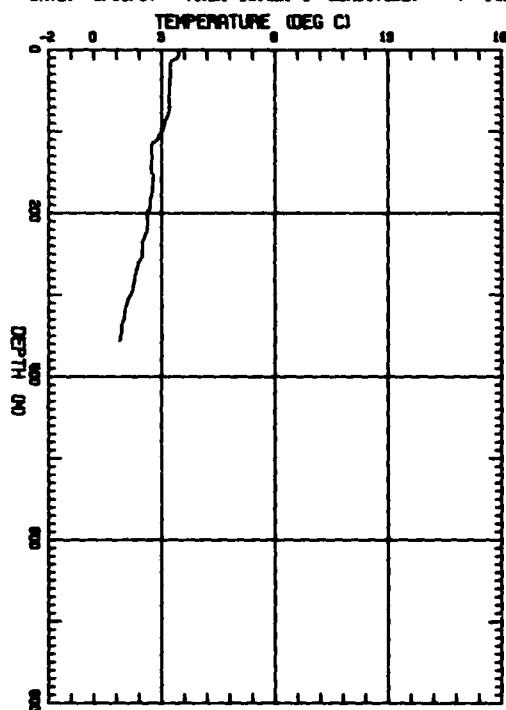
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 31 CHANNEL: 14 LATITUDE: 05 41.4
DATE: 5/15/87 TIME: 13: 54: 0 LONGITUDE: -7 10.2



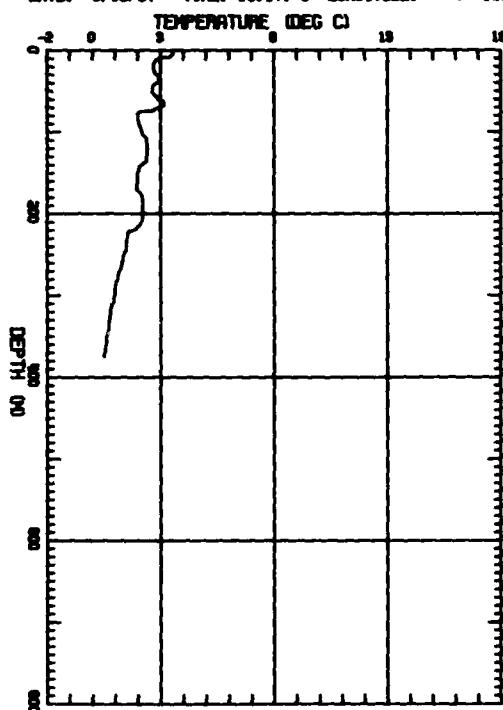
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 32 CHANNEL: 16 LATITUDE: 05 41.4
DATE: 5/15/87 TIME: 13: 54: 0 LONGITUDE: -7 17.0



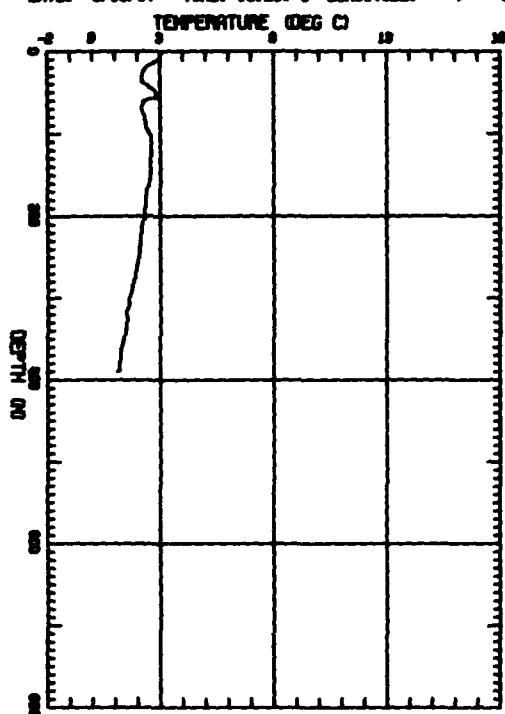
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 33 CHANNEL: 12 LATITUDE: 05 20.2
DATE: 5/15/87 TIME: 13:12: 0 LONGITUDE: -7 10.4



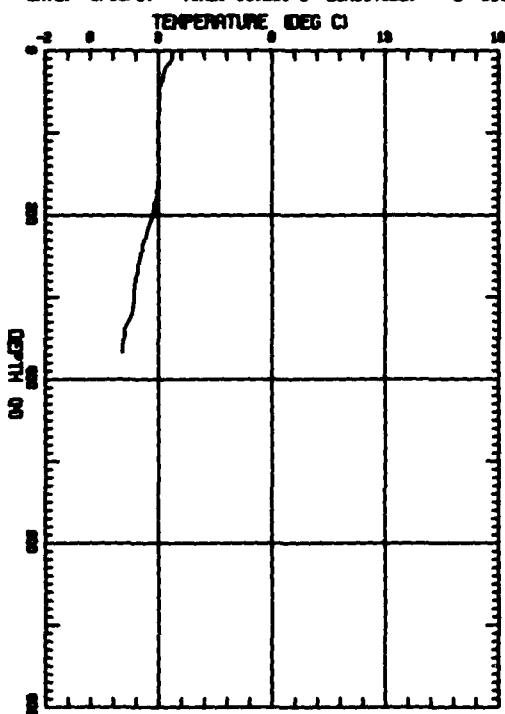
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 34 CHANNEL: 16 LATITUDE: 05 40.2
DATE: 5/15/87 TIME: 13:17: 0 LONGITUDE: -7 10.7



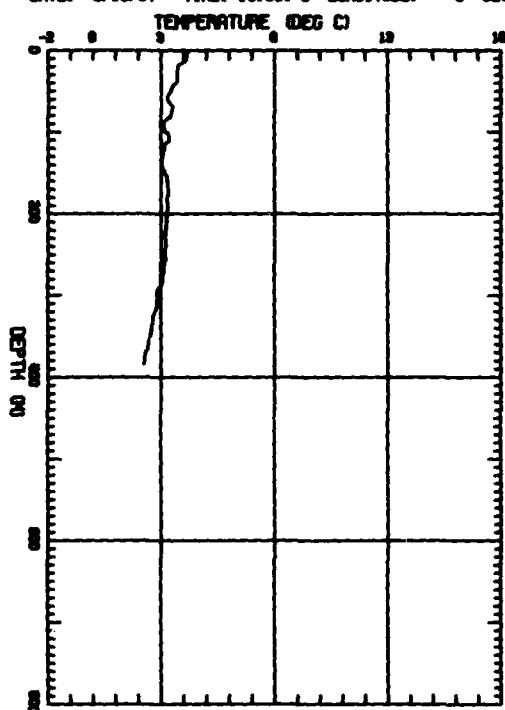
PROJECT: TACTICAL SCENICGRAPHY
DROP NO.: 36 CHANNEL: 12 LATITUDE: 08 20.2
DATE: 5/15/87 TIME: 13:28:0 LONGITUDE: -7 -1



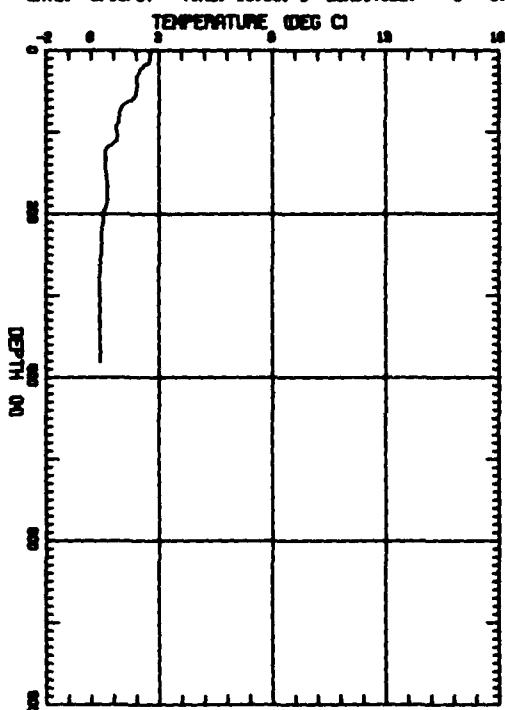
PROJECT: TACTICAL SCENICGRAPHY
DROP NO.: 37 CHANNEL: 12 LATITUDE: 08 40.1
DATE: 5/15/87 TIME: 13:28:0 LONGITUDE: -6 -68.2



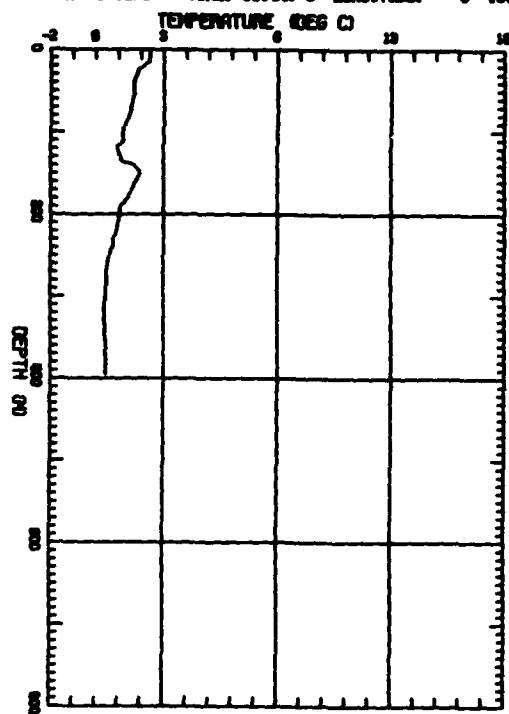
PROJECT: TACTICAL SCENICGRAPHY
DROP NO.: 38 CHANNEL: 16 LATITUDE: 08 39.8
DATE: 5/15/87 TIME: 13:33:0 LONGITUDE: -6 -62.0



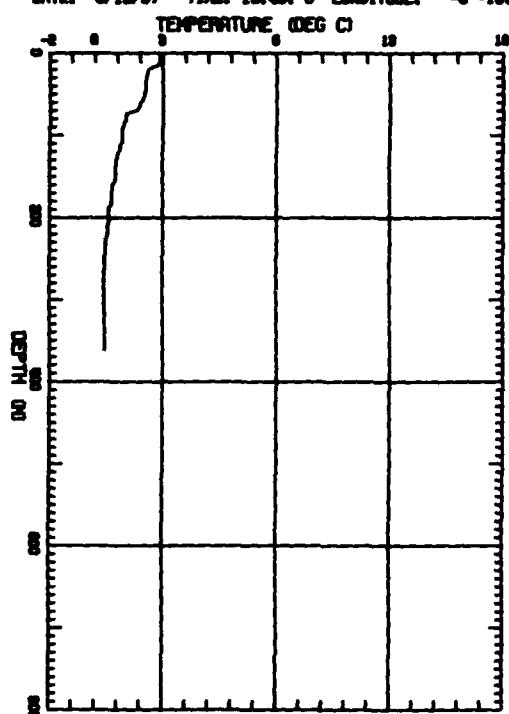
PROJECT: TACTICAL SCENICGRAPHY
DROP NO.: 39 CHANNEL: 12 LATITUDE: 07 2.6
DATE: 5/15/87 TIME: 13:38:0 LONGITUDE: -6 -68.0



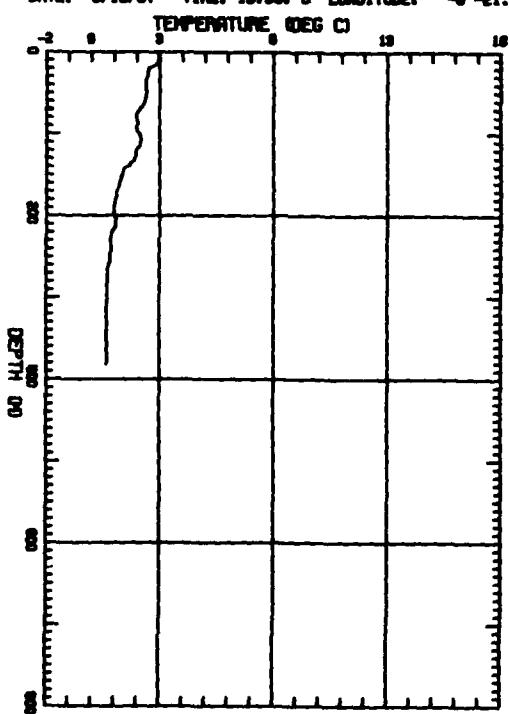
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 60 CHANNEL: 16 LATITUDE: 08 00.1
DATE: 5/15/87 TIME: 19:46:0 LONGITUDE: -6 16.4



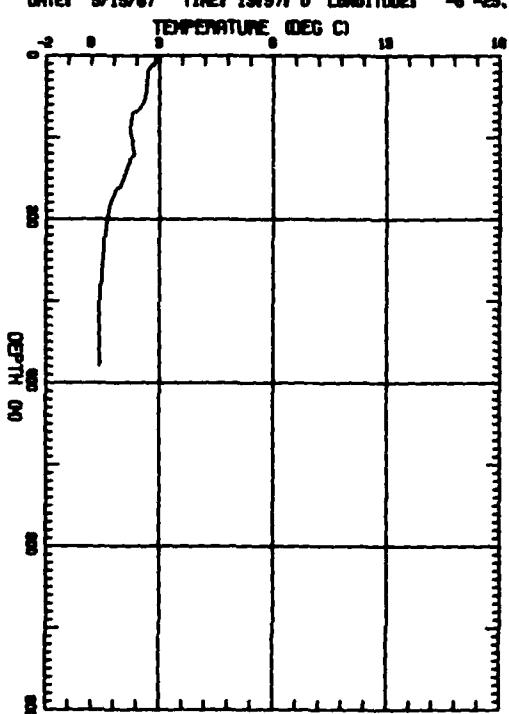
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 61 CHANNEL: 16 LATITUDE: 08 18.8
DATE: 5/15/87 TIME: 19:46:0 LONGITUDE: -6 18.2



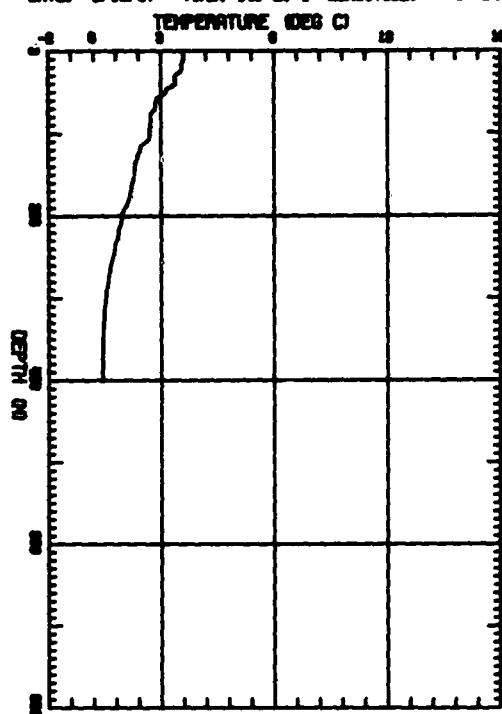
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 62 CHANNEL: 12 LATITUDE: 08 28.8
DATE: 5/15/87 TIME: 19:53:0 LONGITUDE: -6 21.5



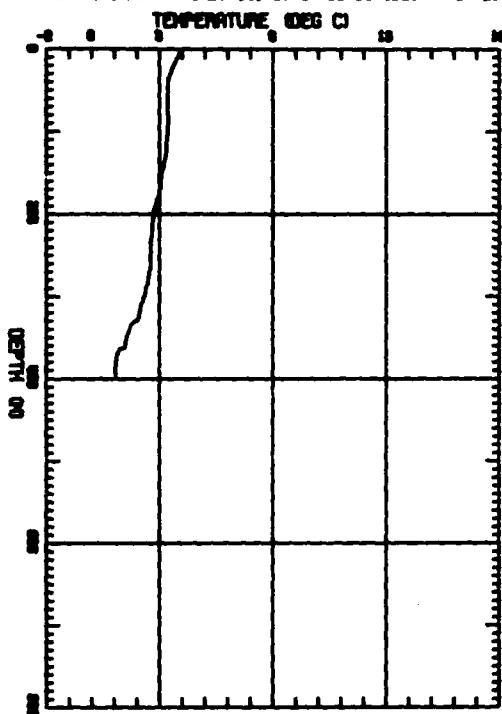
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 63 CHANNEL: 16 LATITUDE: 08 38.8
DATE: 5/15/87 TIME: 19:57:0 LONGITUDE: -6 23.0



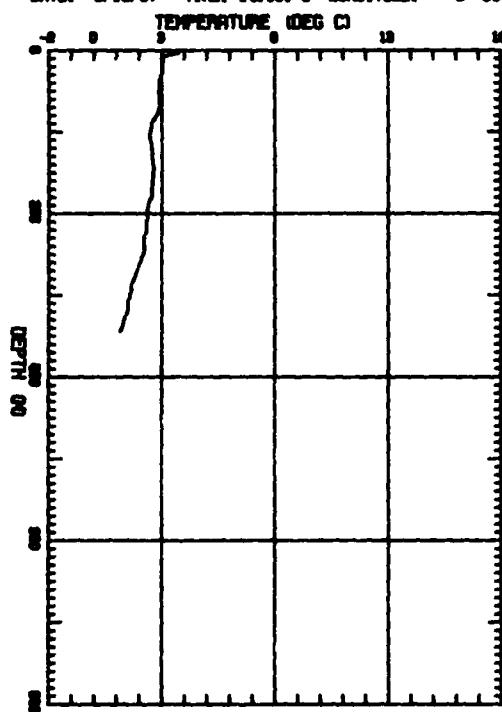
PROJECT: TACTICAL SCENICROPHY
DROP NO: 66 CHANNEL: 16 LATITUDE: 06 18.0
DATE: 5/15/87 TIME: 16:22:0 LONGITUDE: -0 -30.5



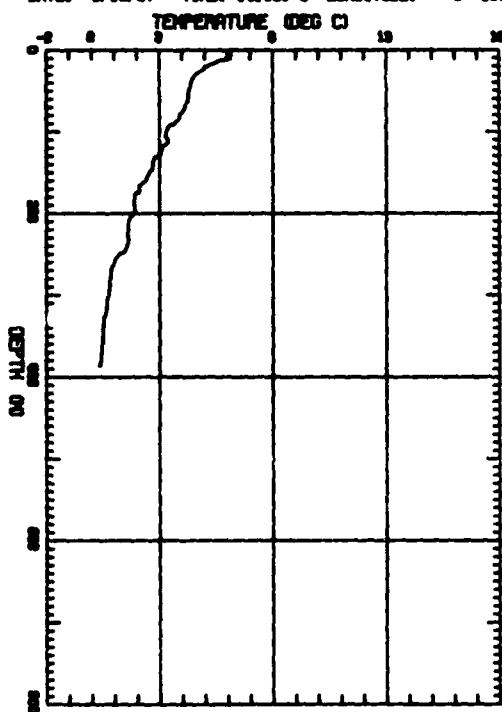
PROJECT: TACTICAL SCENICROPHY
DROP NO: 66 CHANNEL: 16 LATITUDE: 06 00.1
DATE: 5/15/87 TIME: 16:22:0 LONGITUDE: -0 -30.2



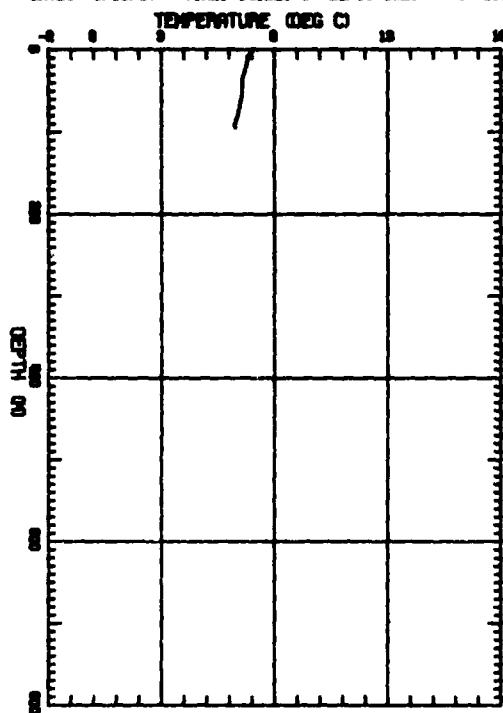
PROJECT: TACTICAL SCENICROPHY
DROP NO: 66 CHANNEL: 16 LATITUDE: 06 20.2
DATE: 5/15/87 TIME: 16:13:0 LONGITUDE: -0 -31.5



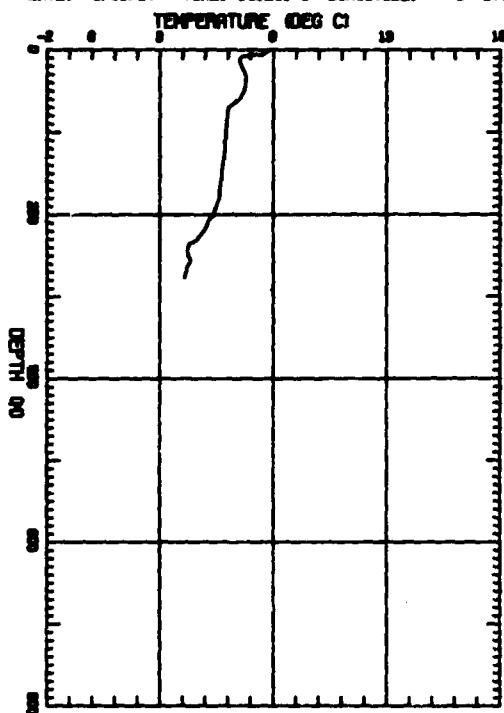
PROJECT: TACTICAL SCENICROPHY
DROP NO: 67 CHANNEL: 12 LATITUDE: 06 58.0
DATE: 5/15/87 TIME: 16:16:0 LONGITUDE: -0 -30.8



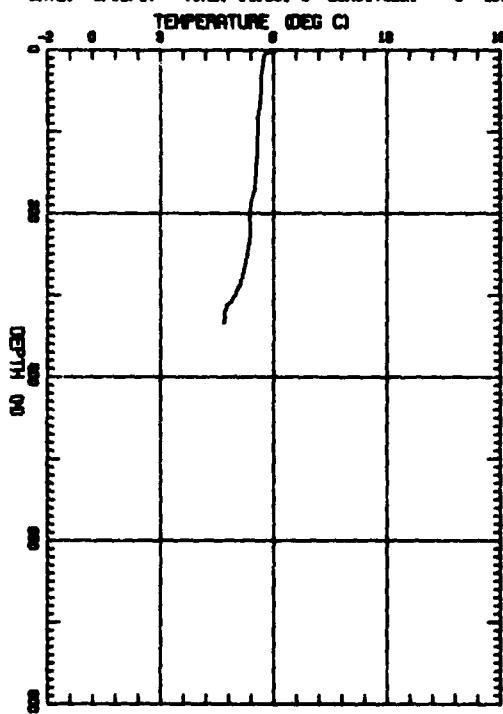
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 48 CHANNEL: 16 LATITUDE: 82 38.5
DATE: 5/15/87 TIME: 14:22:0 LONGITUDE: -6 -35.0



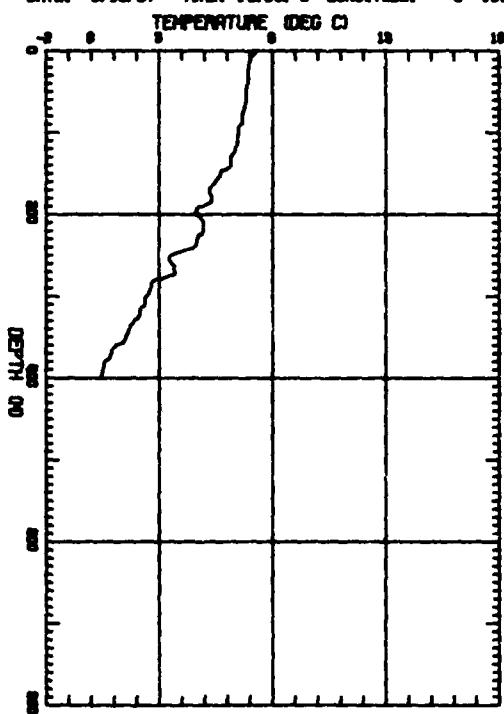
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 48 CHANNEL: 16 LATITUDE: 82 18.1
DATE: 5/15/87 TIME: 14:22:0 LONGITUDE: -6 -37.5



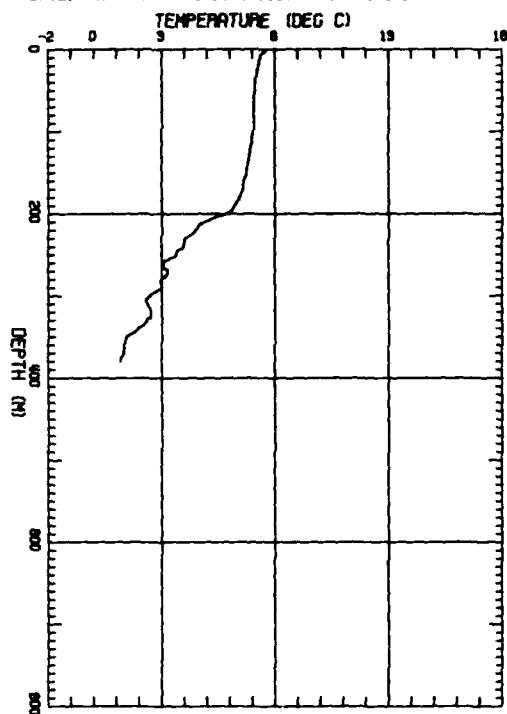
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 50 CHANNEL: 12 LATITUDE: 82 38.6
DATE: 5/15/87 TIME: 14:30:0 LONGITUDE: -6 -40.0



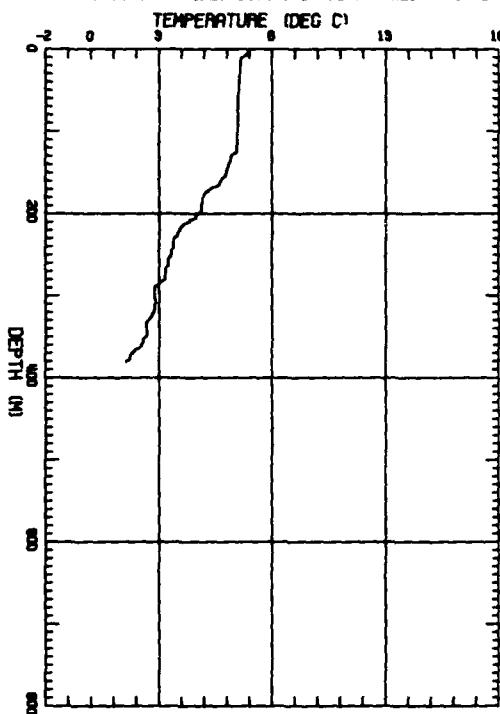
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 51 CHANNEL: 16 LATITUDE: 82 38.6
DATE: 5/15/87 TIME: 14:34:0 LONGITUDE: -6 -18.1



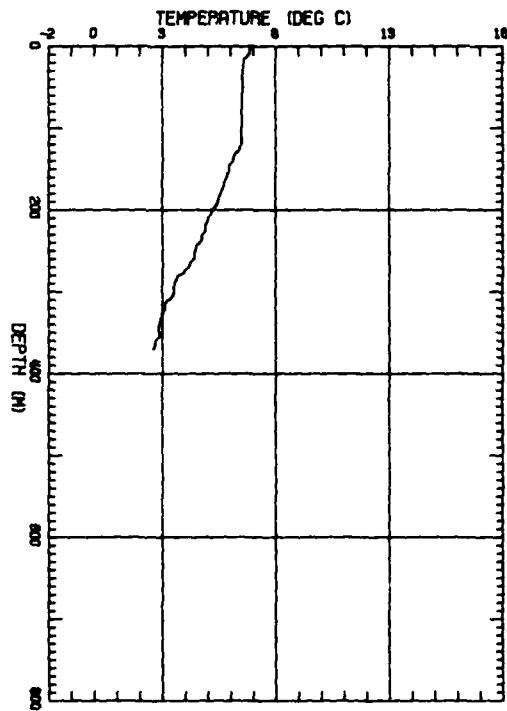
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 52 CHANNEL: 16 LATITUDE: 63 22.6
DATE: 5/15/87 TIME: 14:38:0 LONGITUDE: -9 -18.7



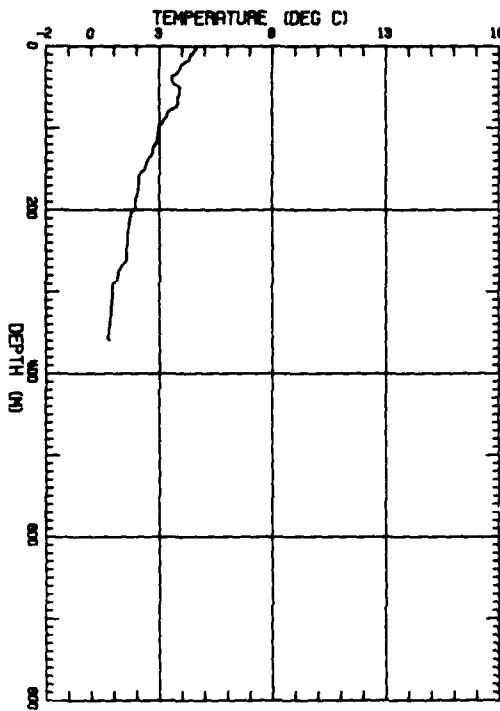
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 53 CHANNEL: 12 LATITUDE: 63 38.5
DATE: 5/15/87 TIME: 14:49:0 LONGITUDE: -9 -20.5



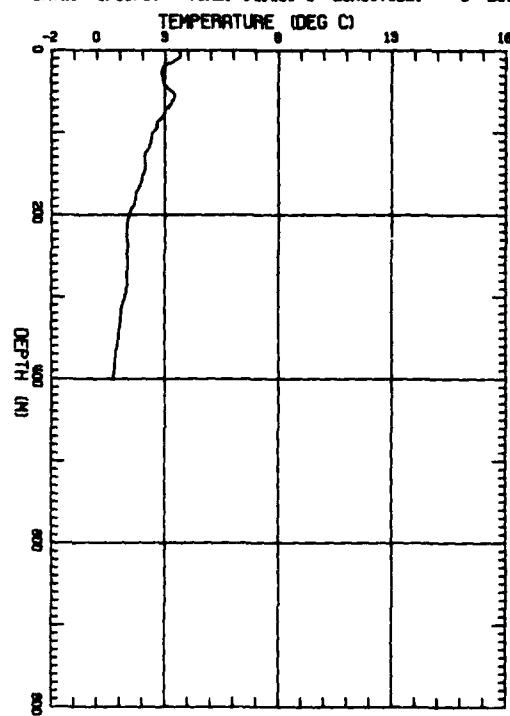
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 54 CHANNEL: 14 LATITUDE: 63 58.7
DATE: 5/15/87 TIME: 14:47:0 LONGITUDE: -9 -20.2



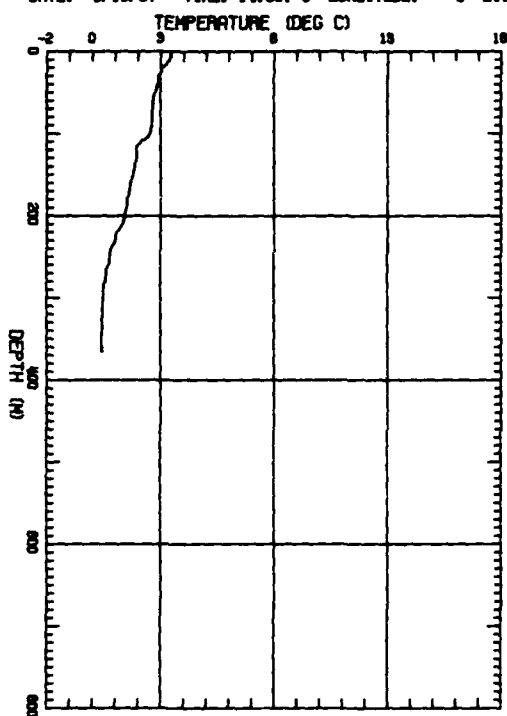
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 55 CHANNEL: 16 LATITUDE: 64 22.1
DATE: 5/15/87 TIME: 14:51:0 LONGITUDE: -9 -20.1



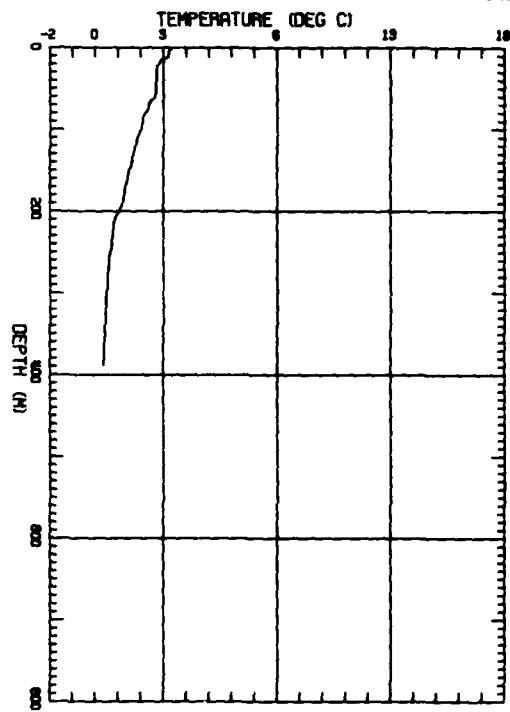
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 58 CHANNEL: 12 LATITUDE: 64 41.5
DATE: 5/15/87 TIME: 14:55:0 LONGITUDE: -8 20.7



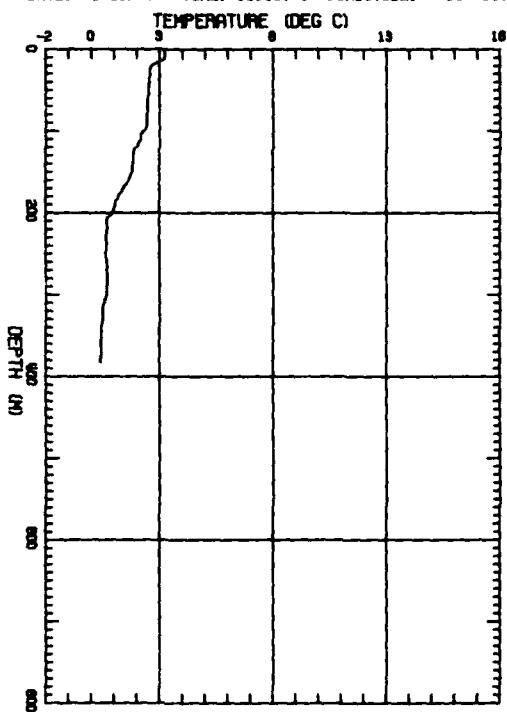
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 57 CHANNEL: 14 LATITUDE: 65 1.0
DATE: 5/15/87 TIME: 14:58:0 LONGITUDE: -8 21.8



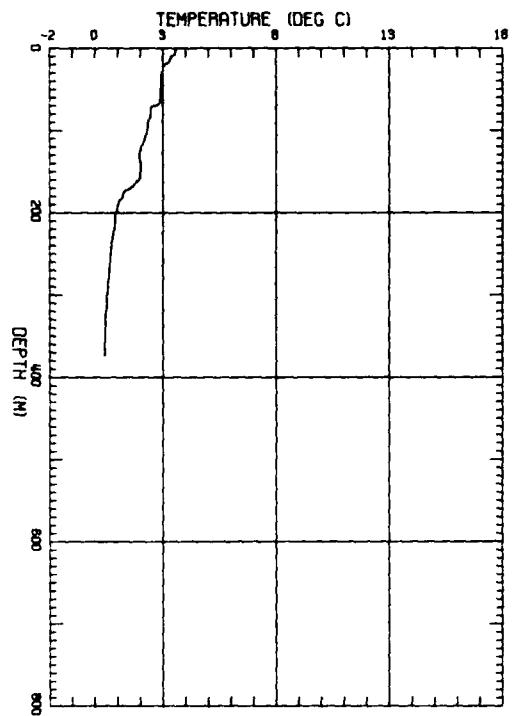
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 58 CHANNEL: 12 LATITUDE: 65 40.2
DATE: 5/15/87 TIME: 15: 6: 0 LONGITUDE: -8 24.8



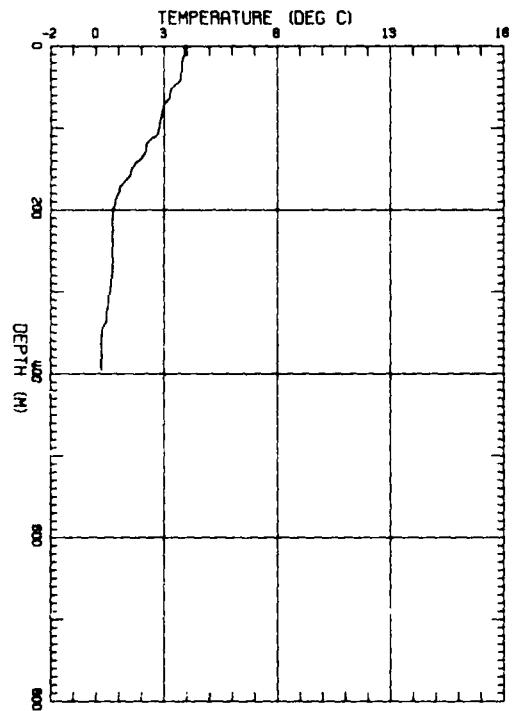
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 58 CHANNEL: 14 LATITUDE: 65 40.6
DATE: 5/15/87 TIME: 15:18:0 LONGITUDE: -10 59.3



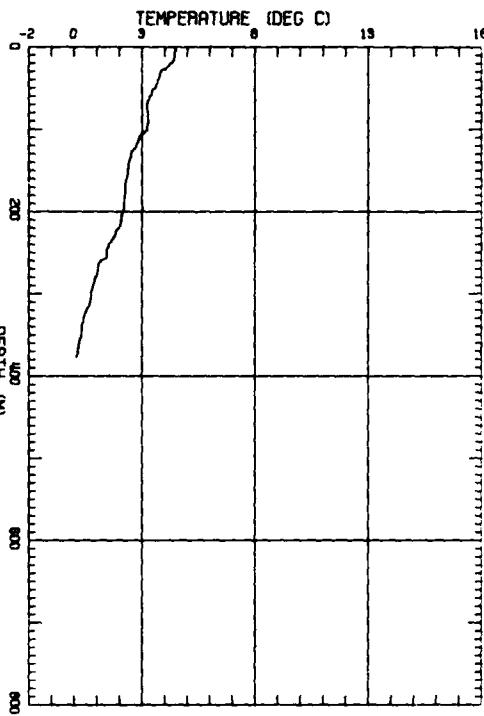
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 60 CHANNEL: 16 LATITUDE: 65 20.7
DATE: 5/15/87 TIME: 15:20:0 LONGITUDE: -10 48.6



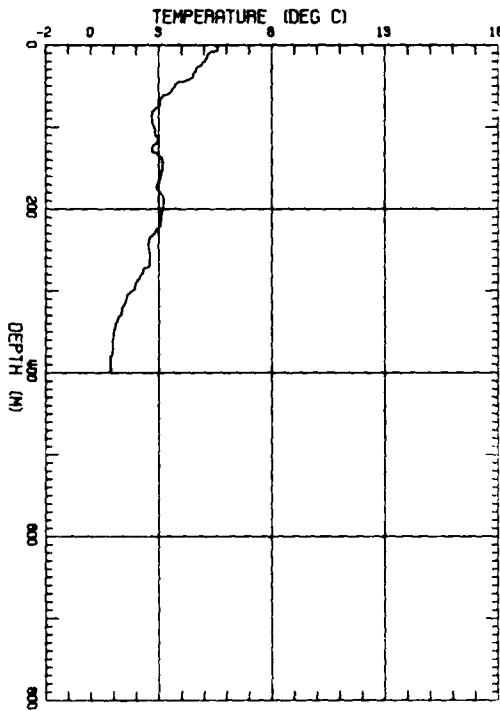
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 62 CHANNEL: 14 LATITUDE: 64 34.5
DATE: 5/15/87 TIME: 15:30:0 LONGITUDE: -10 49.1



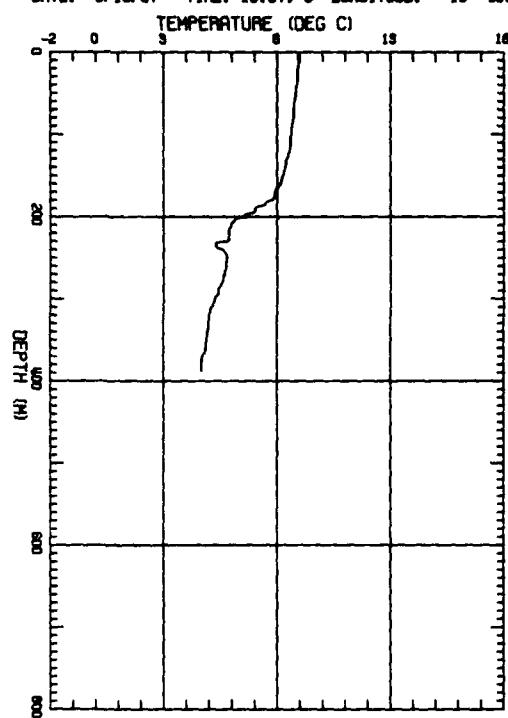
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 61 CHANNEL: 12 LATITUDE: 65 .0
DATE: 5/15/87 TIME: 15:25:0 LONGITUDE: -10 48.4



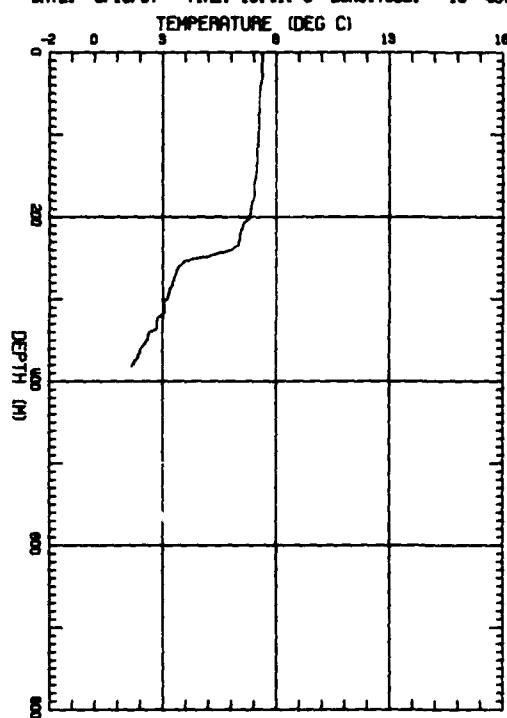
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 63 CHANNEL: 16 LATITUDE: 64 20.3
DATE: 5/15/87 TIME: 15:33:0 LONGITUDE: -10 49.3



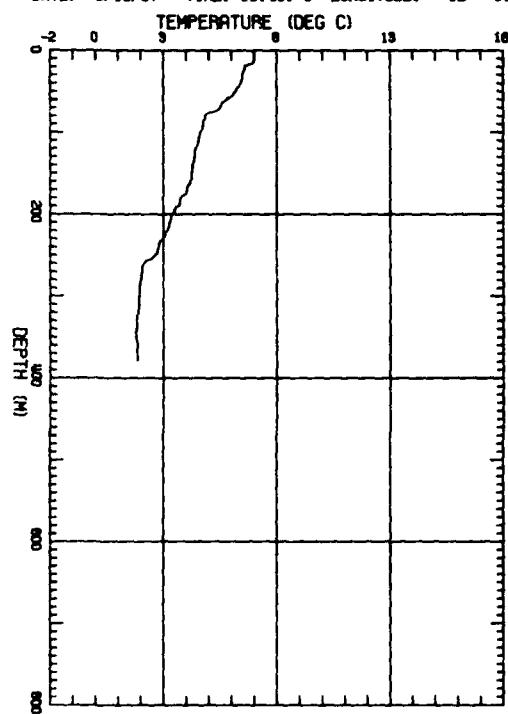
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 64 CHANNEL: 12 LATITUDE: 64 .9
DATE: 5/15/87 TIME: 15:37:0 LONGITUDE: -10 -49.7



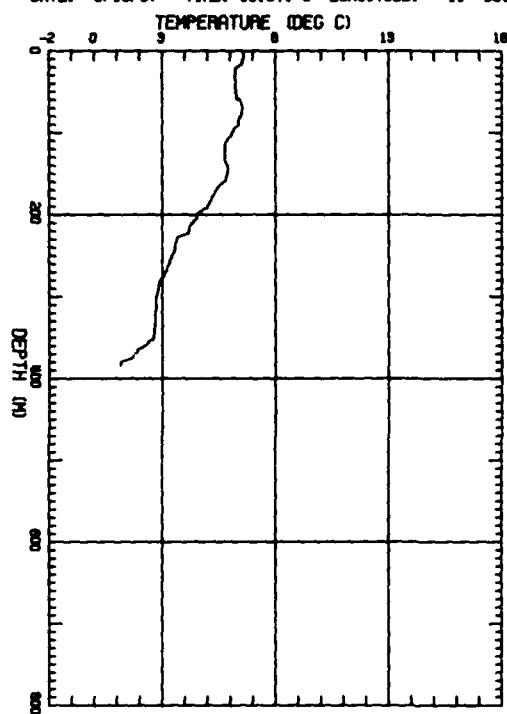
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 65 CHANNEL: 14 LATITUDE: 63 39.4
DATE: 5/15/87 TIME: 15:41:0 LONGITUDE: -10 -49.7



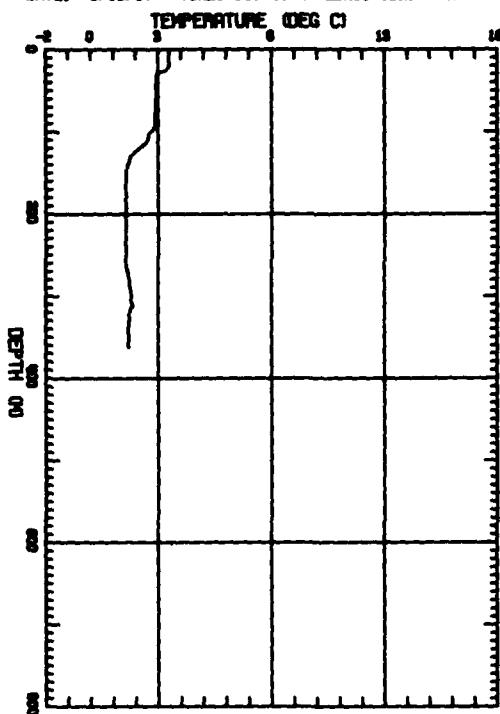
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 66 CHANNEL: 18 LATITUDE: 63 39.7
DATE: 5/15/87 TIME: 15:49:0 LONGITUDE: -12 -1.3



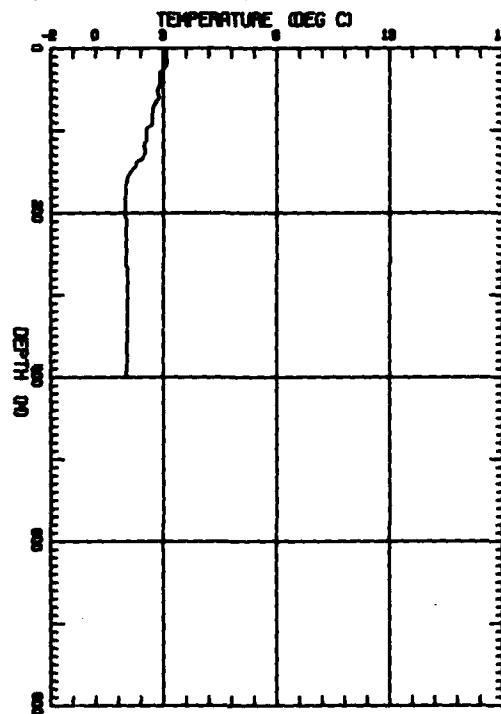
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 67 CHANNEL: 14 LATITUDE: 64 19.6
DATE: 5/15/87 TIME: 15:57:0 LONGITUDE: -11 -59.8



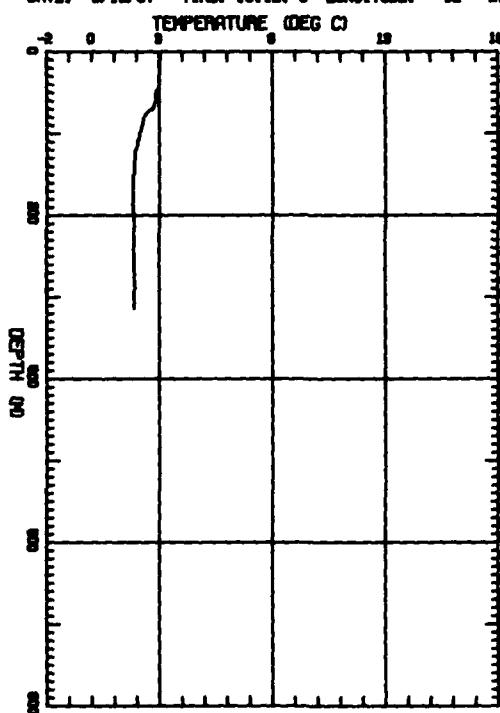
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 68 CHANNEL: 16 LATITUDE: 66 39.6
DATE: 5/15/87 TIME: 16:11:0 LONGITUDE: -12 0.0



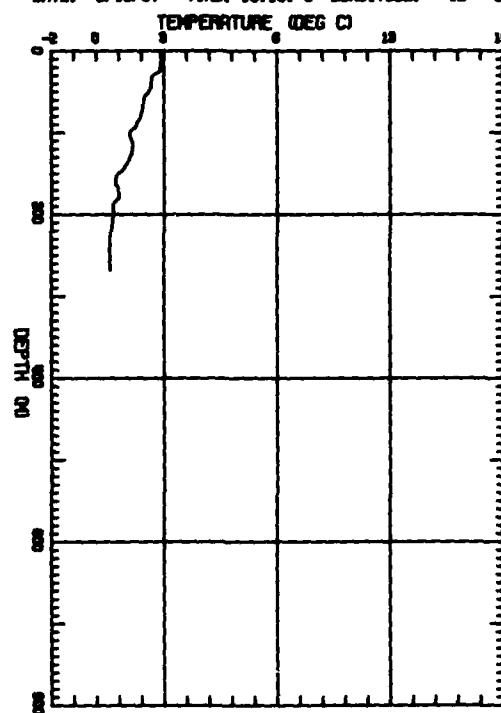
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 68 CHANNEL: 16 LATITUDE: 66 19.6
DATE: 5/15/87 TIME: 16:04:0 LONGITUDE: -12 -1.4



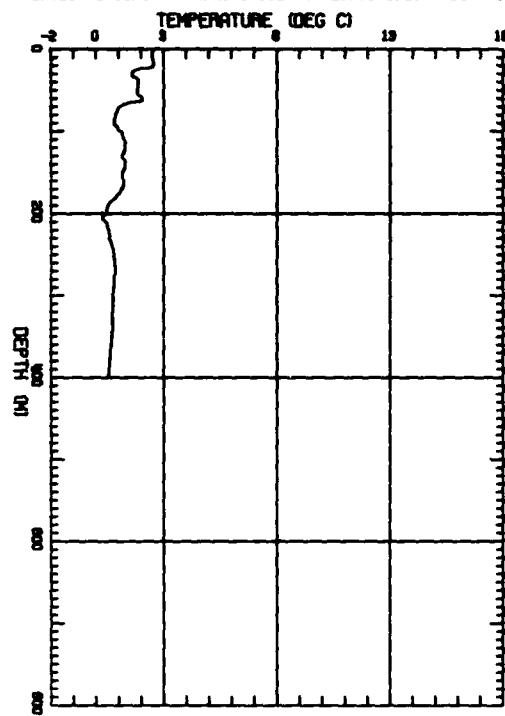
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 70 CHANNEL: 16 LATITUDE: 66 39.6
DATE: 5/15/87 TIME: 16:12:0 LONGITUDE: -12 -2.0



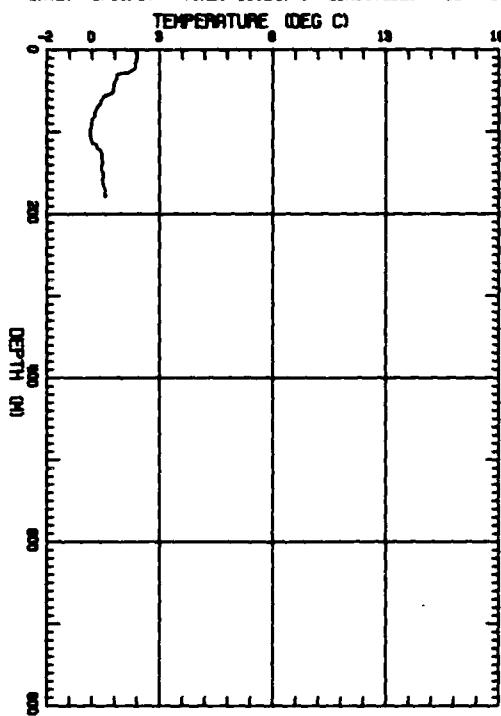
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 71 CHANNEL: 16 LATITUDE: 66 .1
DATE: 5/15/87 TIME: 16:16:0 LONGITUDE: -12 -3.1



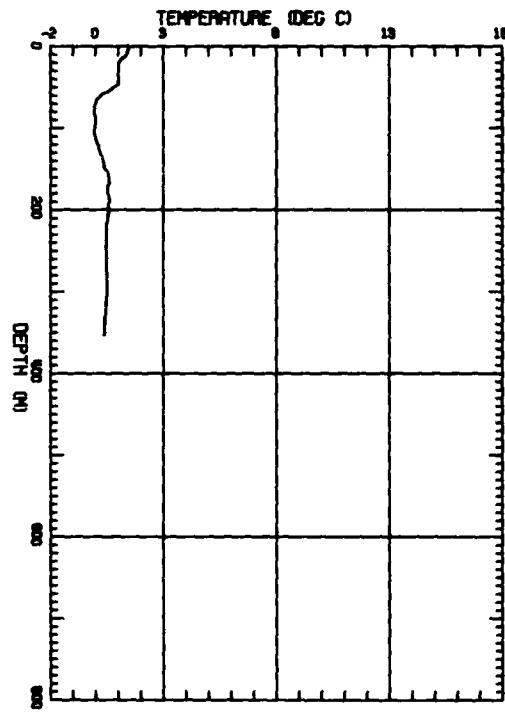
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 72 CHANNEL: 16 LATITUDE: 86 20.0
DATE: 5/15/87 TIME: 16:20:0 LONGITUDE: -12 -3.6



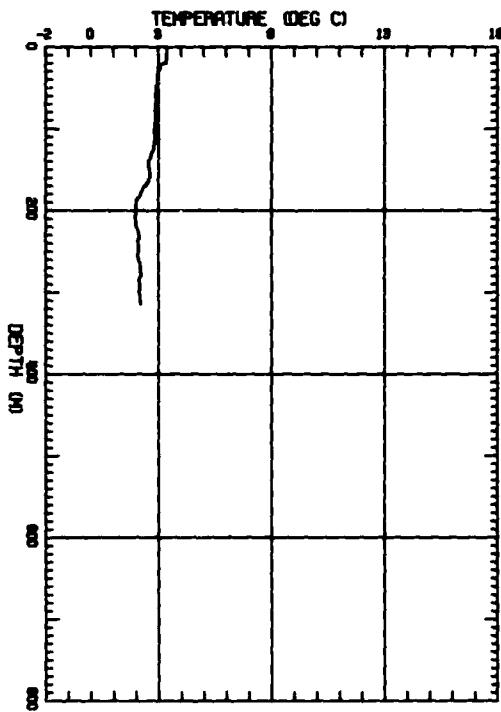
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 73 CHANNEL: 12 LATITUDE: 86 40.7
DATE: 5/15/87 TIME: 16:24:0 LONGITUDE: -12 -3.6



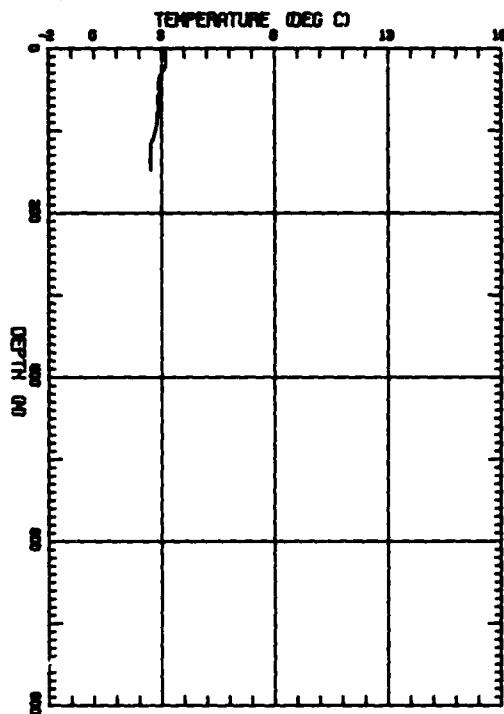
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 74 CHANNEL: 14 LATITUDE: 87 .0
DATE: 5/15/87 TIME: 16:30:57 LONGITUDE: -12 -6.1



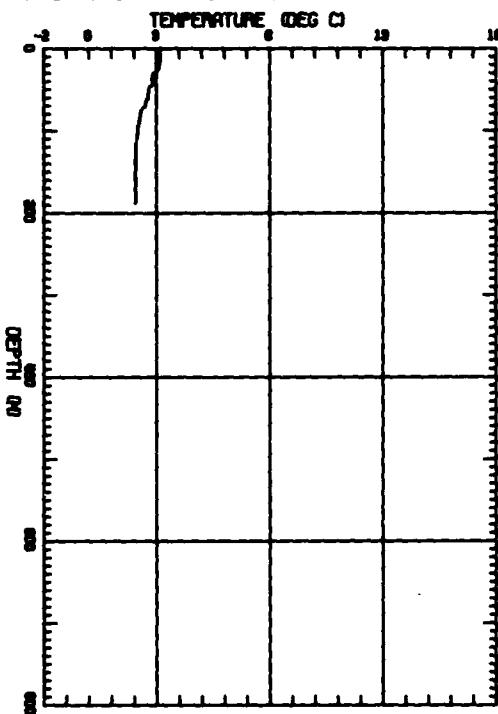
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 76 CHANNEL: 16 LATITUDE: 87 .0
DATE: 5/15/87 TIME: 16:40:4 LONGITUDE: -12 -47.0



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 77 CHANNEL: 18 LATITUDE: 06 58.0
DATE: 5/15/87 TIME: 16:40:6 LONGITUDE: -12 50.1

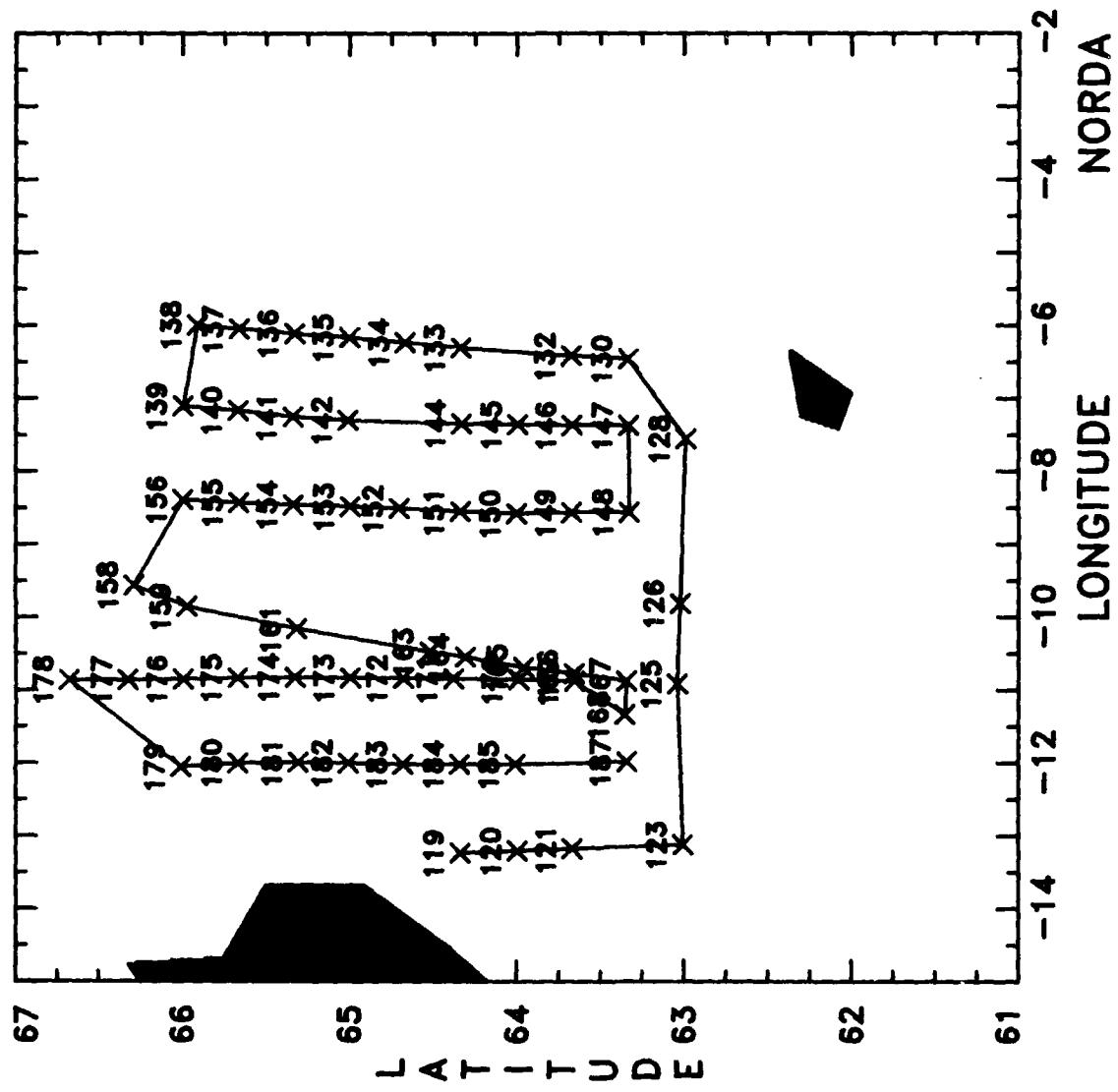


PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 78 CHANNEL: 18 LATITUDE: 06 58.4
DATE: 5/15/87 TIME: 16:58:57 LONGITUDE: -12 50.3

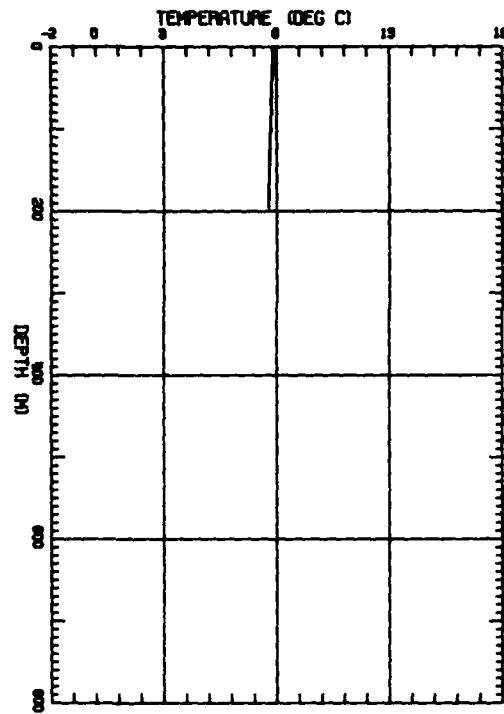


Appendix B.
Drop Positions and Data Profiles, Flight 2,
18 May 1987, Iceland-Faeroe Frontal Region.

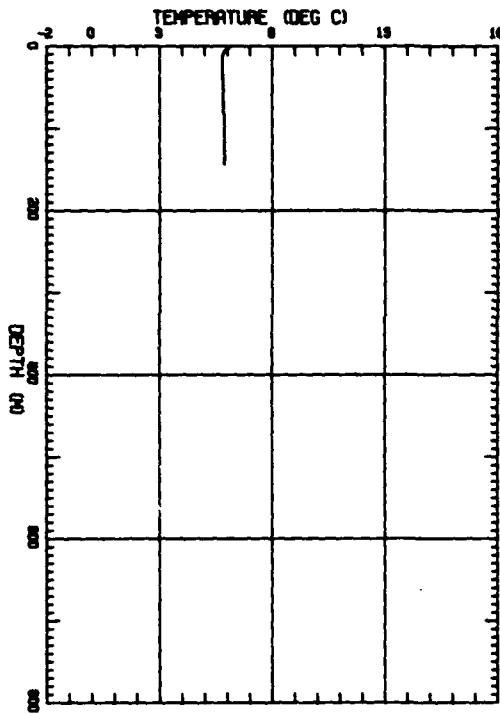
59 AXBTs 18 May 1987



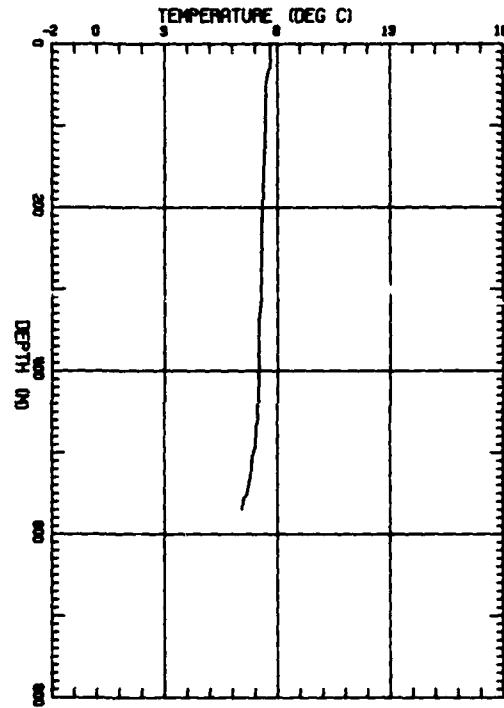
PROJECT: TACTICAL OCENNOGRAPHY
DROP NO: 119 CHANNEL: 16 LATITUDE: 68 20.2
DATE: 5/18/87 TIME: 9:44:31 LONGITUDE: -19 -14.2



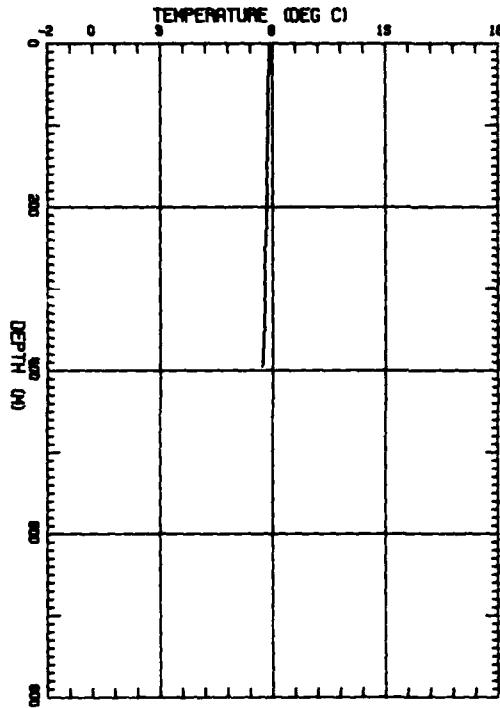
PROJECT: TACTICAL OCENNOGRAPHY
DROP NO: 120 CHANNEL: 14 LATITUDE: 68 59.7
DATE: 5/18/87 TIME: 9:48:19 LONGITUDE: -19 -12.4



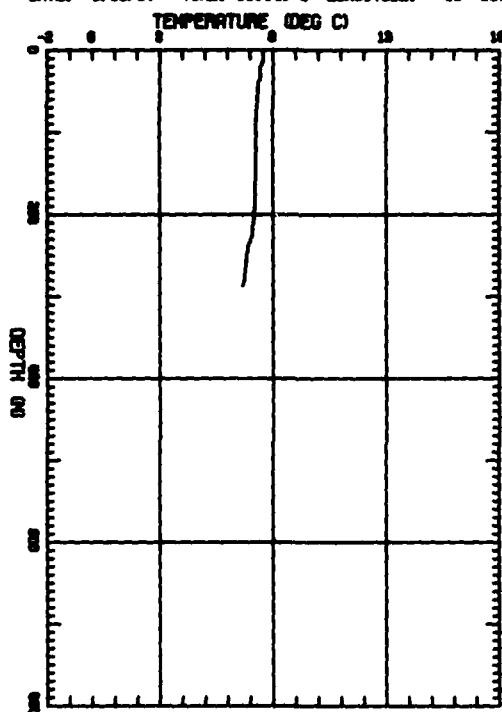
PROJECT: TACTICAL OCENNOGRAPHY
DROP NO: 121 CHANNEL: 16 LATITUDE: 68 40.1
DATE: 5/18/87 TIME: 9:52:51 LONGITUDE: -19 -10.4



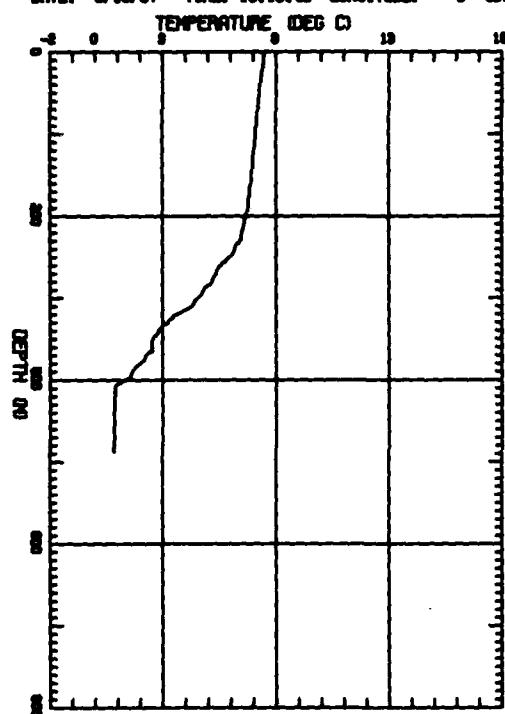
PROJECT: TACTICAL OCENNOGRAPHY
DROP NO: 122 CHANNEL: 14 LATITUDE: 68 .9
DATE: 5/18/87 TIME: 10: 1:25 LONGITUDE: -19 -7.5



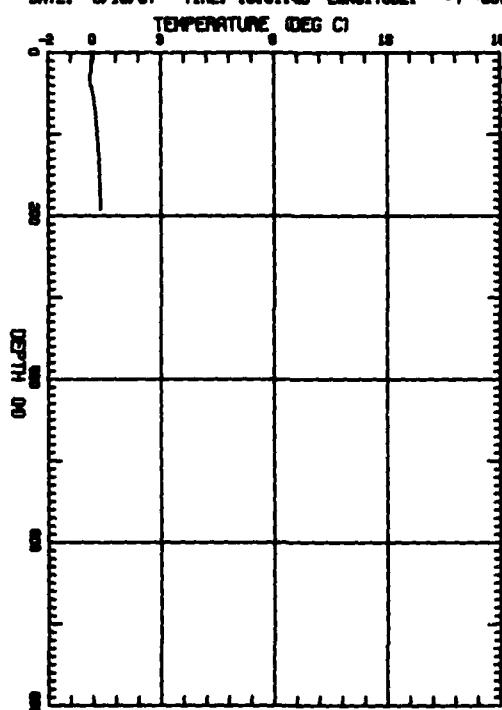
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 125 CHANNEL: 12 LATITUDE: 68 2.3
DATE: 5/18/87 TIME: 10:14:0 LONGITUDE: -10 -56.1



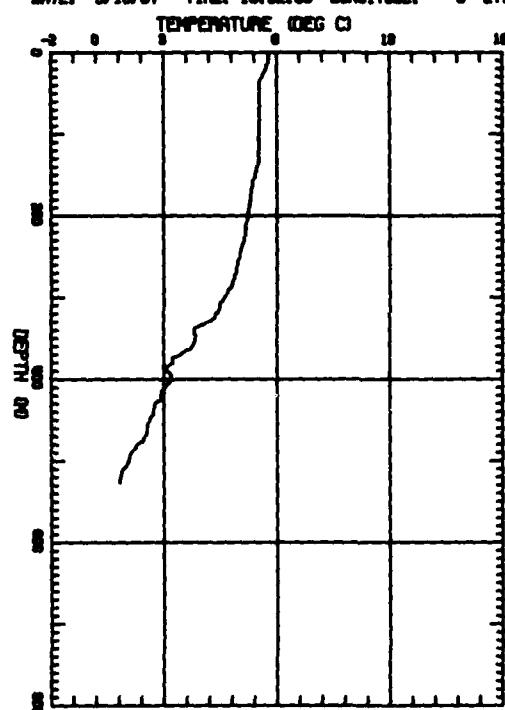
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 125 CHANNEL: 16 LATITUDE: 68 1.3
DATE: 5/18/87 TIME: 10:18:43 LONGITUDE: -9 -48.0



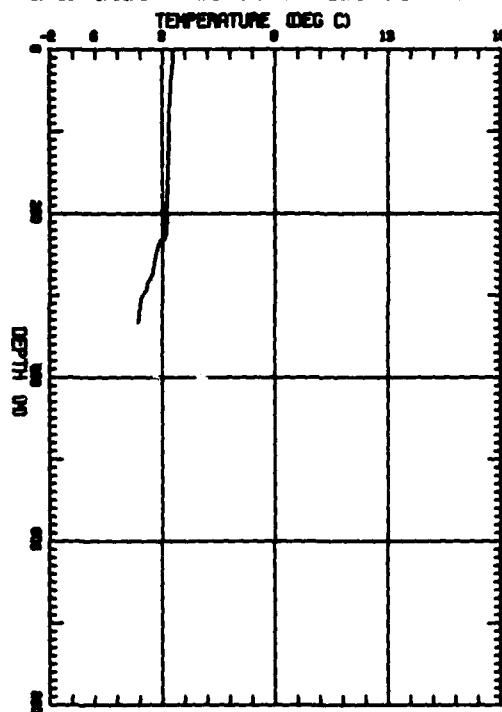
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 126 CHANNEL: 18 LATITUDE: 68 58.2
DATE: 5/18/87 TIME: 10:31:40 LONGITUDE: -7 -33.4



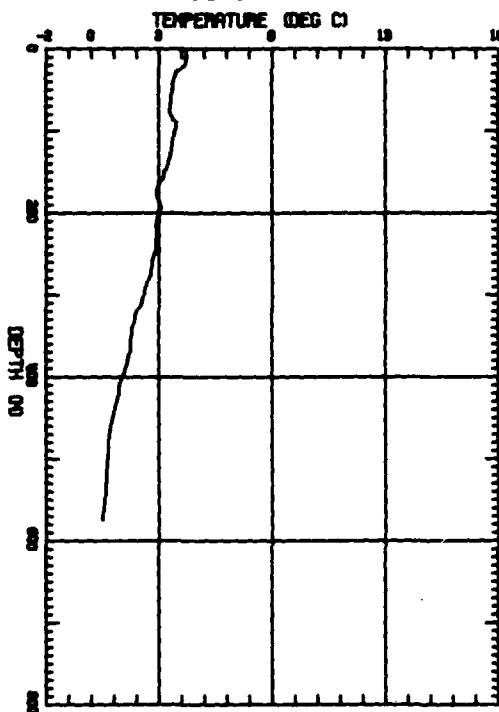
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 130 CHANNEL: 14 LATITUDE: 68 20.0
DATE: 5/18/87 TIME: 10:52:38 LONGITUDE: -8 -27.8



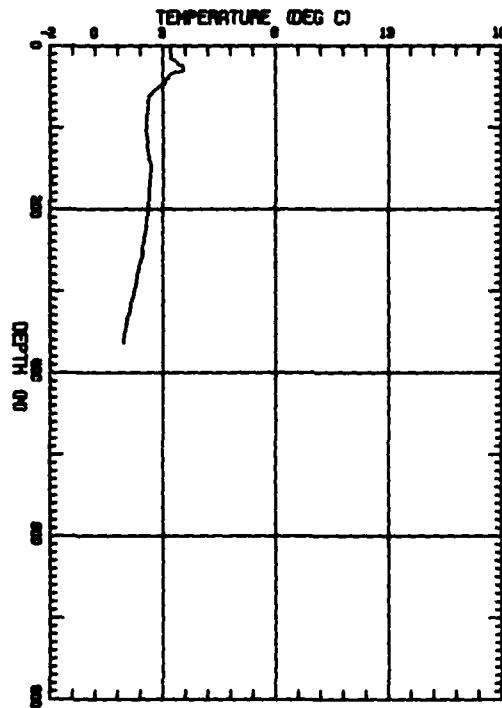
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 132 CHANNEL: 16 LATITUDE: 03 40.5
DATE: 5/18/87 TIME: 11: 1: 8 LONGITUDE: -6 24.9



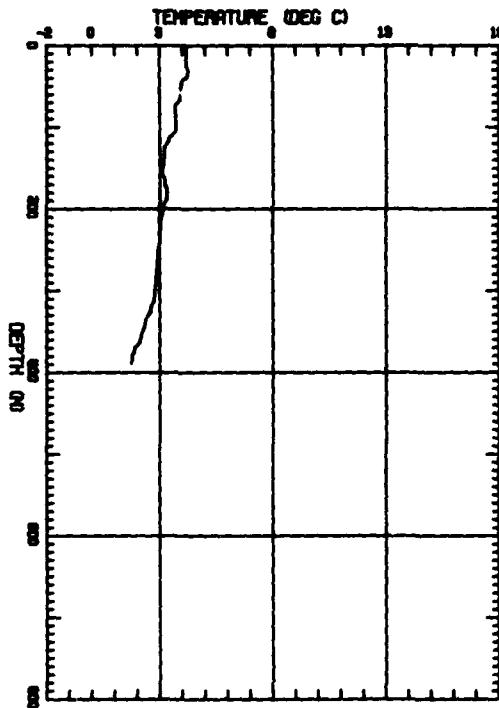
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 133 CHANNEL: 16 LATITUDE: 03 20.0
DATE: 5/18/87 TIME: 11: 5: 8 LONGITUDE: -6 18.1



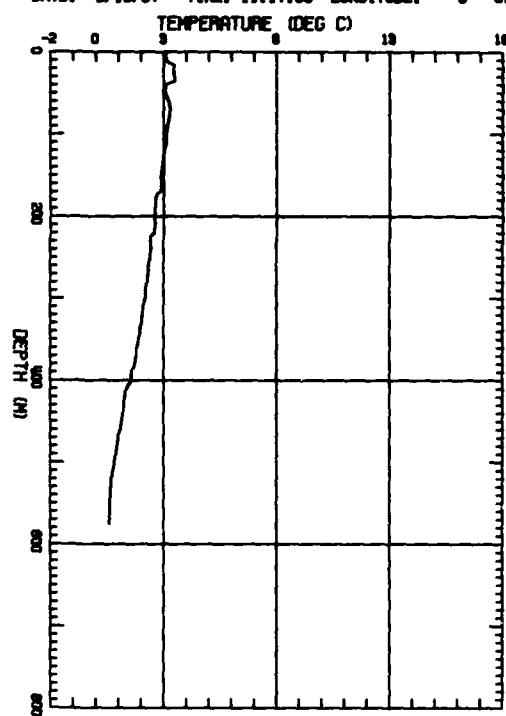
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 134 CHANNEL: 12 LATITUDE: 03 40.0
DATE: 5/18/87 TIME: 11: 0: 11 LONGITUDE: -6 14.0



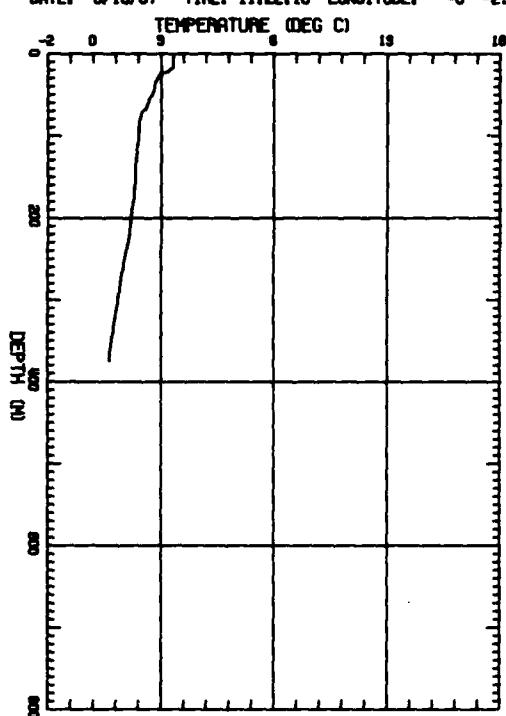
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 135 CHANNEL: 16 LATITUDE: 03 .0
DATE: 5/18/87 TIME: 11: 13: 38 LONGITUDE: -6 0.9



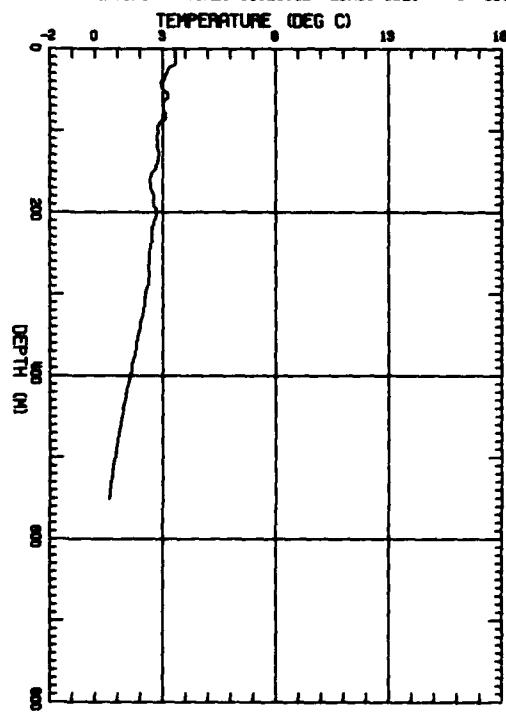
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 136 CHANNEL: 16 LATITUDE: 65 19.7
DATE: 5/18/87 TIME: 11:17:50 LONGITUDE: -6 -6.5



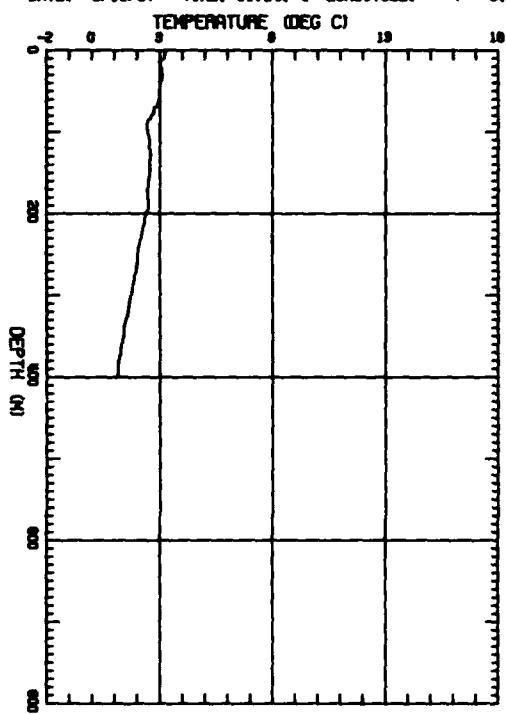
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 137 CHANNEL: 12 LATITUDE: 65 38.6
DATE: 5/18/87 TIME: 11:22:10 LONGITUDE: -6 -2.7



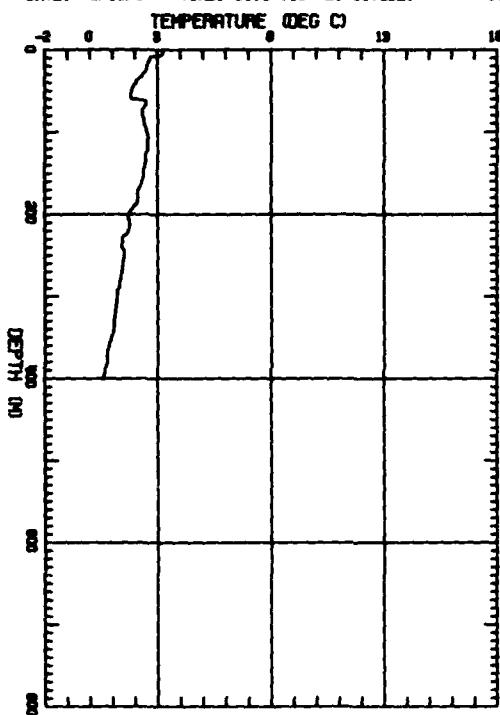
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 138 CHANNEL: 16 LATITUDE: 65 54.8
DATE: 5/18/87 TIME: 11:28:32 LONGITUDE: -5 -59.6



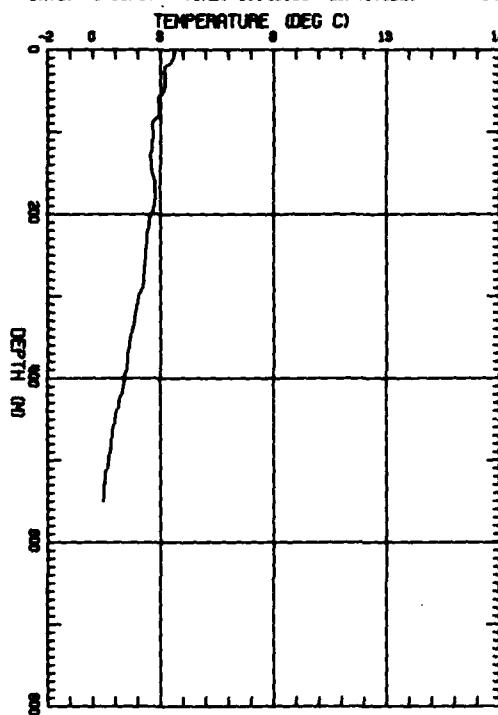
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 139 CHANNEL: 16 LATITUDE: 65 59.7
DATE: 5/18/87 TIME: 11:34:44 LONGITUDE: -7 -6.3



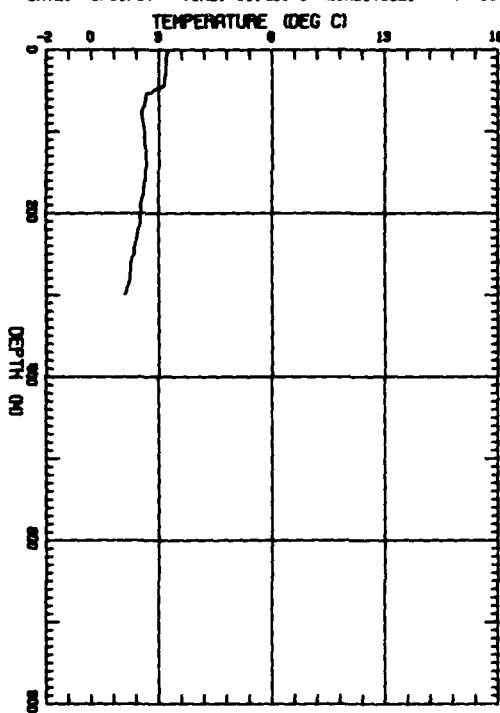
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 140 CHANNEL: 12 LATITUDE: 65 10.0
DATE: 5/18/87 TIME: 11:37:50 LONGITUDE: -7 -9.9



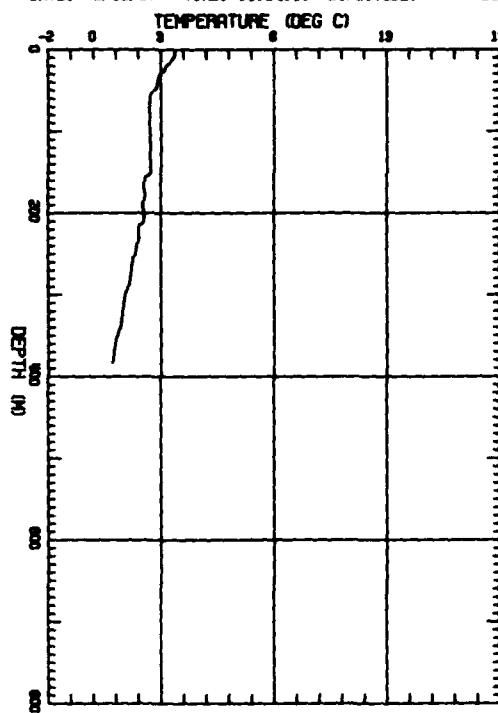
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 141 CHANNEL: 14 LATITUDE: 65 20.3
DATE: 5/18/87 TIME: 11:41:53 LONGITUDE: -7 -15.0



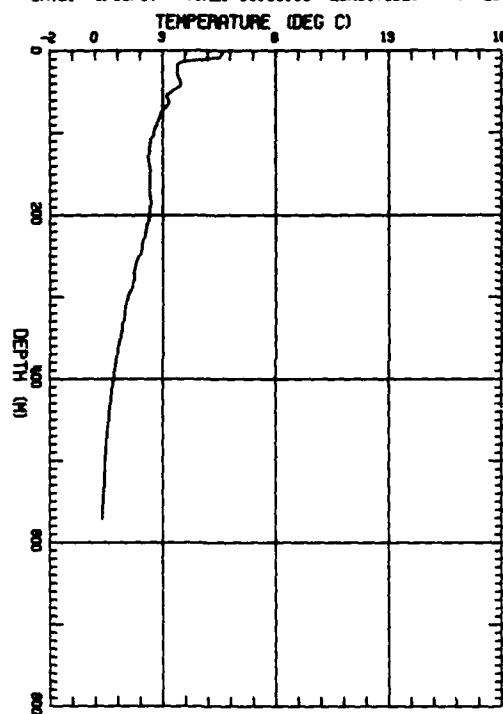
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 142 CHANNEL: 16 LATITUDE: 65 .5
DATE: 5/18/87 TIME: 11:48:15 LONGITUDE: -7 -18.0



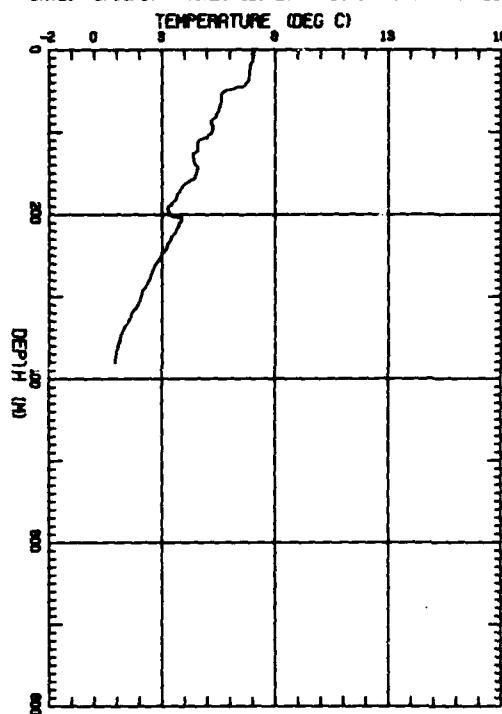
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 144 CHANNEL: 14 LATITUDE: 65 18.7
DATE: 5/18/87 TIME: 11:54:18 LONGITUDE: -7 -20.7



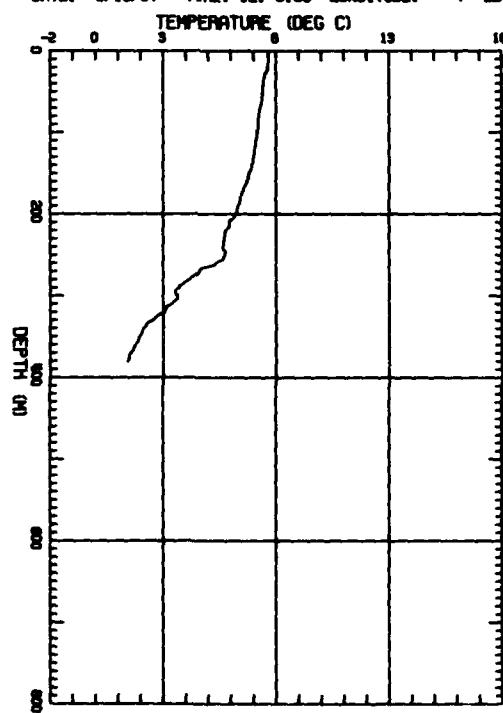
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 145 CHANNEL: 16 LATITUDE: 63 58.6
DATE: 5/18/87 TIME: 11:58:15 LONGITUDE: -7 21.9



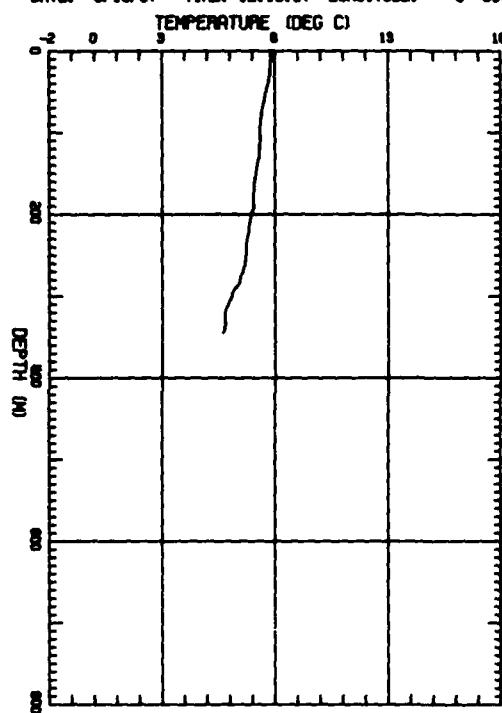
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 146 CHANNEL: 12 LATITUDE: 63 50.1
DATE: 5/18/87 TIME: 12: 2: 0 LONGITUDE: -7 21.9



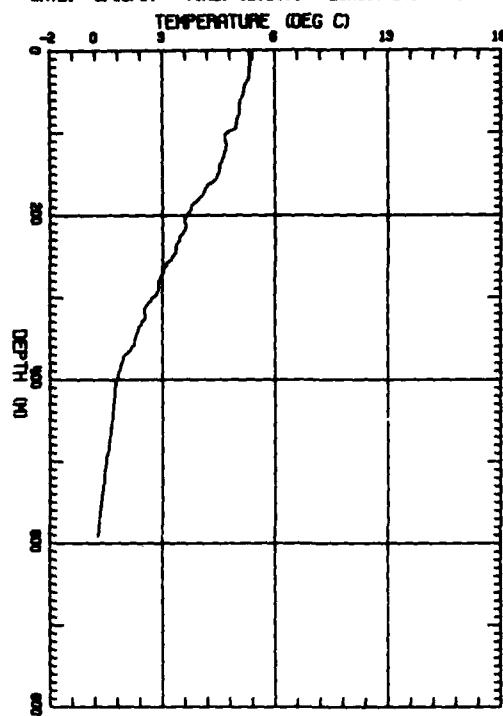
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 147 CHANNEL: 16 LATITUDE: 63 19.8
DATE: 5/18/87 TIME: 12: 5: 53 LONGITUDE: -7 22.4



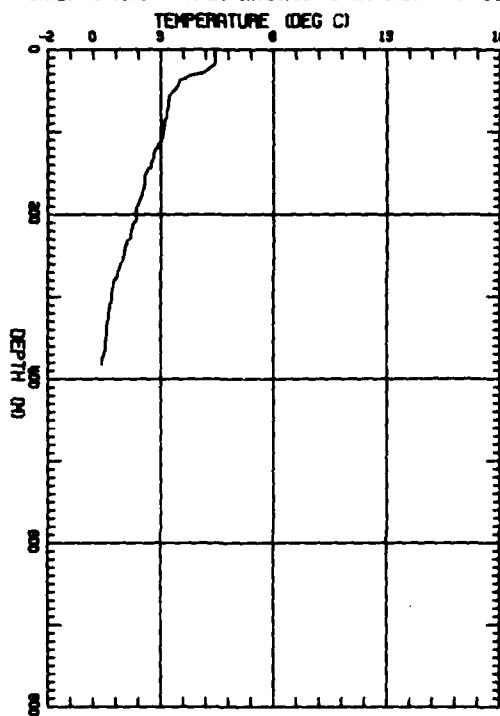
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 148 CHANNEL: 12 LATITUDE: 63 19.5
DATE: 5/18/87 TIME: 12:16:57 LONGITUDE: -8 39.7



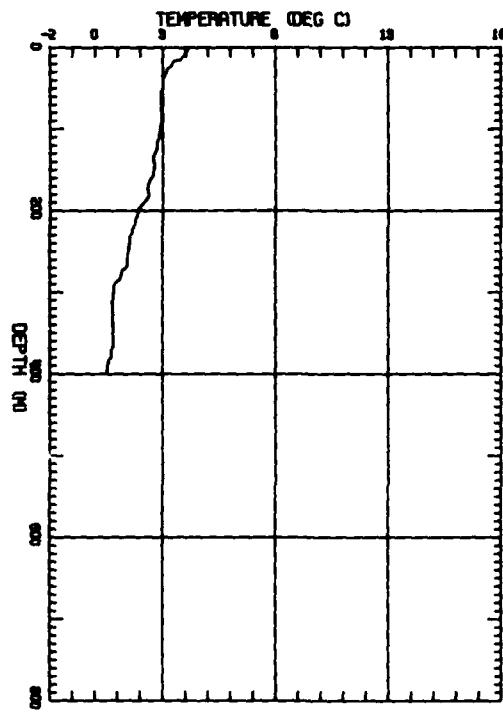
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 148 CHANNEL: 14 LATITUDE: 03 40.2
DATE: 5/18/87 TIME: 12:20:37 LONGITUDE: -6 33.6



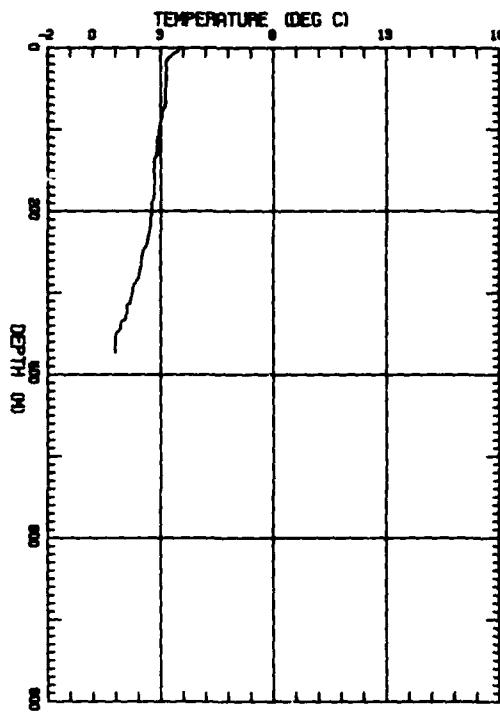
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 150 CHANNEL: 16 LATITUDE: 04 00.0
DATE: 5/18/87 TIME: 12:24:58 LONGITUDE: -6 34.5



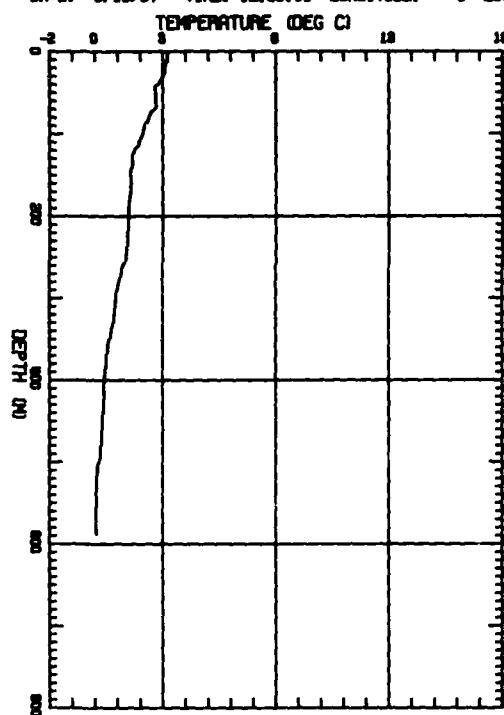
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 151 CHANNEL: 12 LATITUDE: 04 20.1
DATE: 5/18/87 TIME: 12:28:18 LONGITUDE: -6 32.6



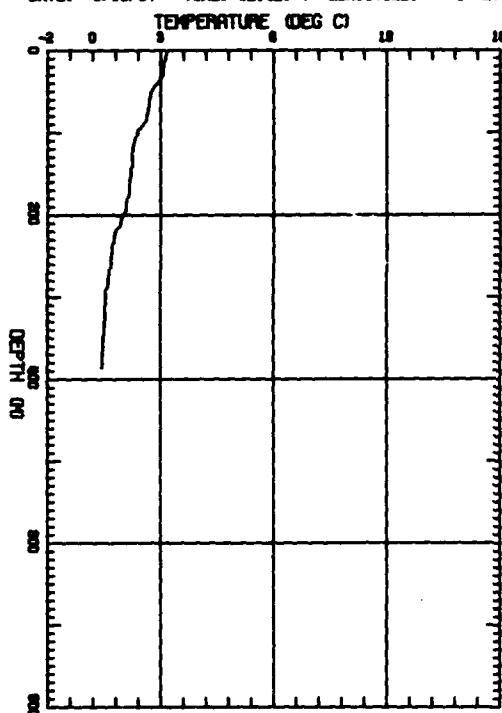
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 152 CHANNEL: 14 LATITUDE: 04 42.0
DATE: 5/18/87 TIME: 12:34:55 LONGITUDE: -6 30.5



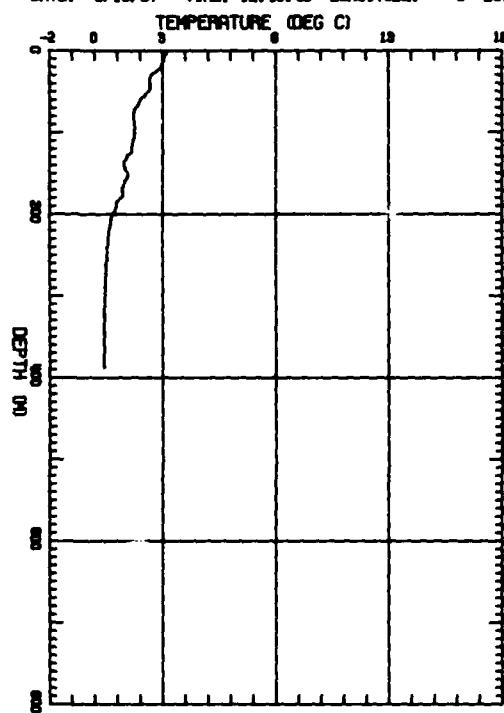
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 153 CHANNEL: 16 LATITUDE: 85 59.6
DATE: 5/18/87 TIME: 12:30:18 LONGITUDE: -6 26.6



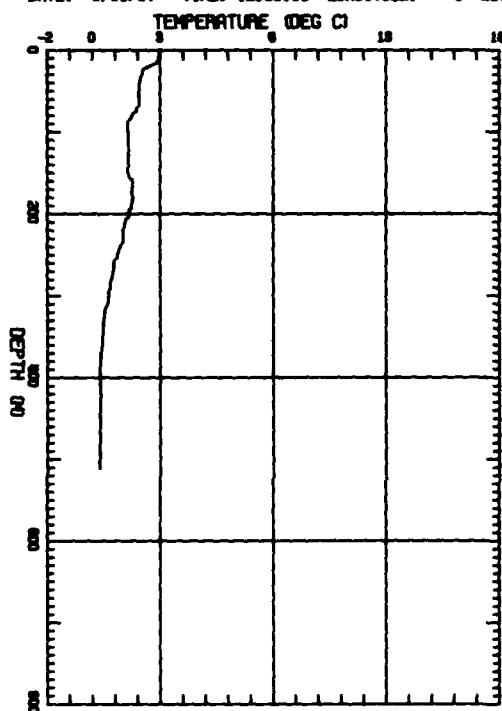
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 154 CHANNEL: 16 LATITUDE: 85 20.1
DATE: 5/18/87 TIME: 12:42:17 LONGITUDE: -6 27.4



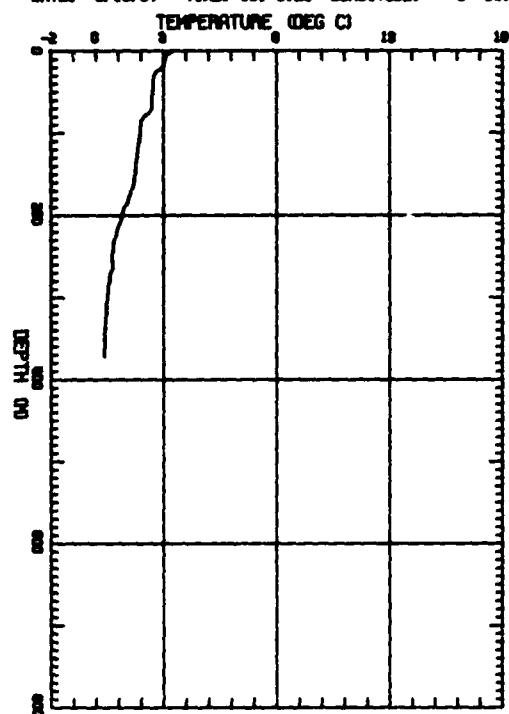
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 155 CHANNEL: 12 LATITUDE: 85 39.6
DATE: 5/18/87 TIME: 12:46:43 LONGITUDE: -6 25.7



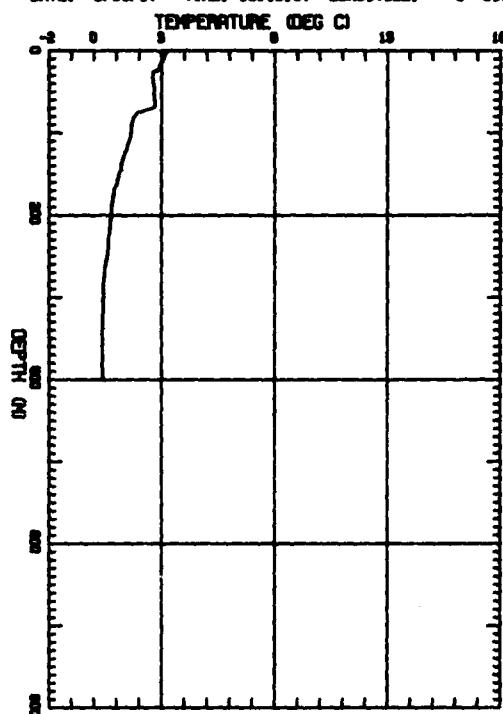
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 156 CHANNEL: 16 LATITUDE: 85 59.7
DATE: 5/18/87 TIME: 12:50:18 LONGITUDE: -6 25.4



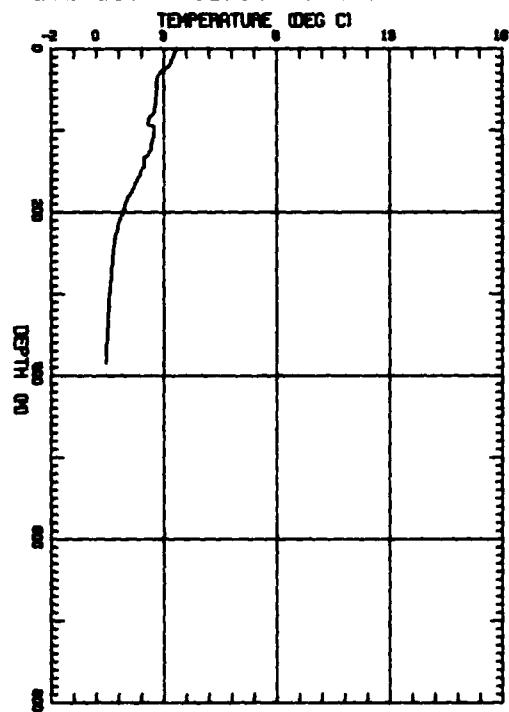
PROJECT: TACTICAL OCENOGRAPHY
DROP NO: 158 CHANNEL: 16 LATITUDE: 65 17.3
DATE: 5/16/87 TIME: 13:42:25 LONGITUDE: -63 33.6



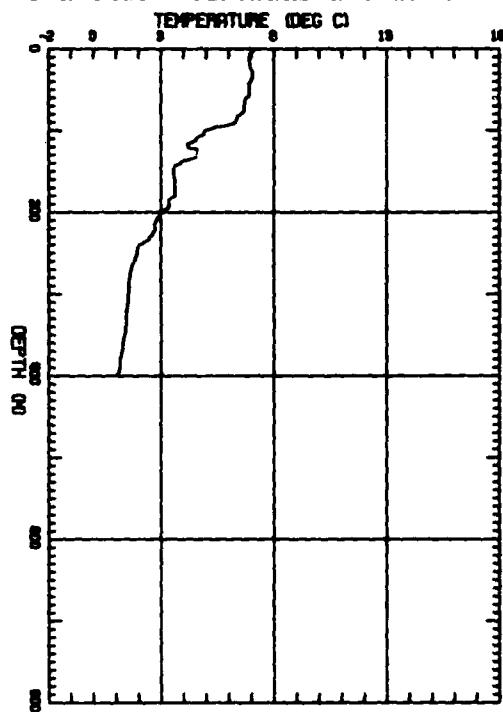
PROJECT: TACTICAL OCENOGRAPHY
DROP NO: 159 CHANNEL: 16 LATITUDE: 65 58.4
DATE: 5/16/87 TIME: 13:43:37 LONGITUDE: -63 51.3



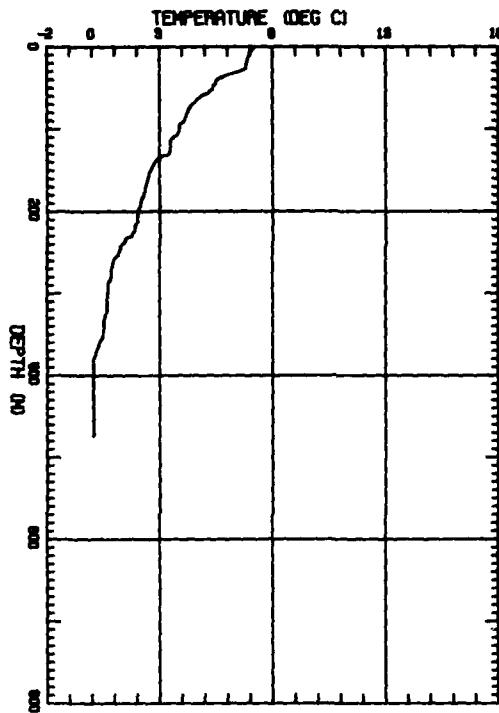
PROJECT: TACTICAL OCENOGRAPHY
DROP NO: 161 CHANNEL: 12 LATITUDE: 65 18.0
DATE: 5/16/87 TIME: 13:21:28 LONGITUDE: -10 36.4



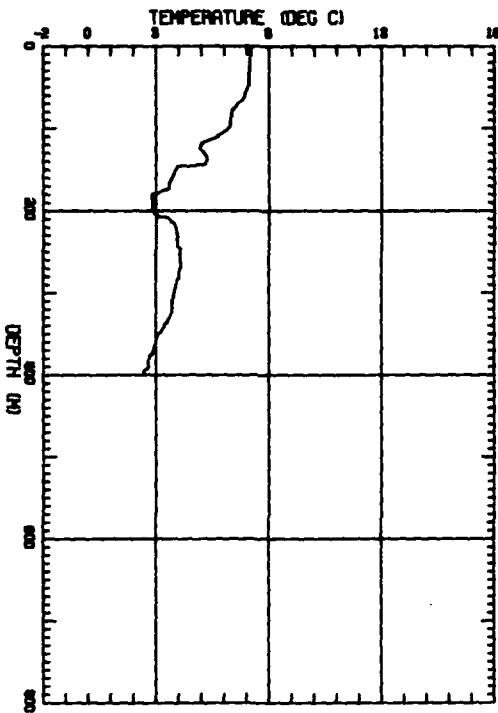
PROJECT: TACTICAL OCENOGRAPHY
DROP NO: 169 CHANNEL: 12 LATITUDE: 64 31.1
DATE: 5/16/87 TIME: 13:43:25 LONGITUDE: -10 28.5



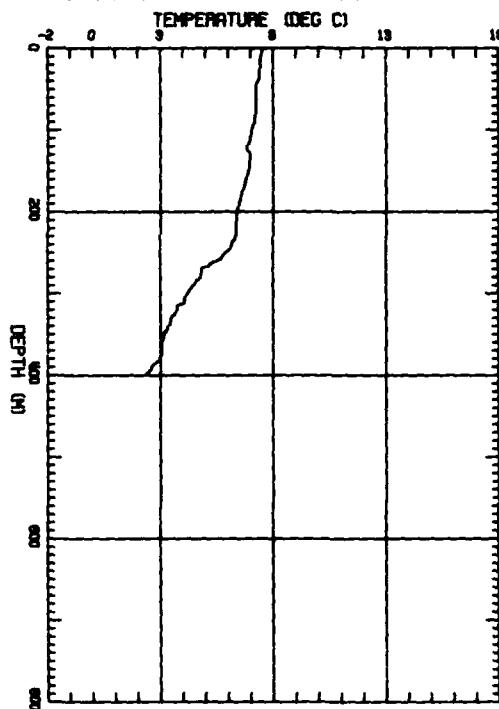
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 104 CHANNEL: 14 LATITUDE: 84 18.4
DATE: 5/18/87 TIME: 13:45:40 LONGITUDE: -10 32.6



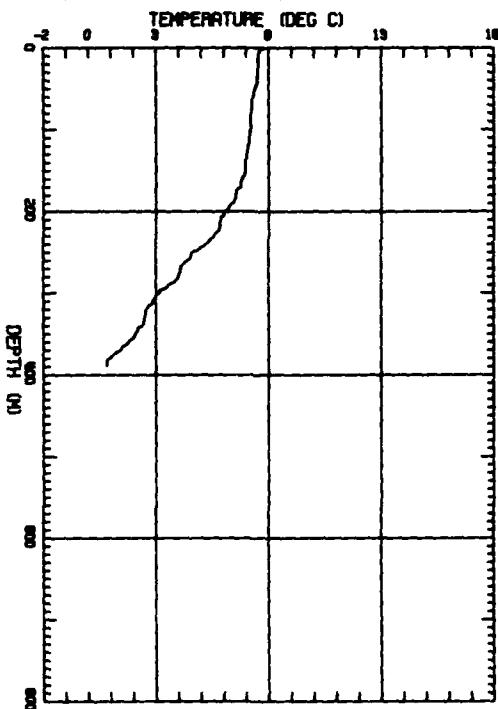
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 105 CHANNEL: 16 LATITUDE: 83 57.5
DATE: 5/18/87 TIME: 13:13:38 LONGITUDE: -10 41.4



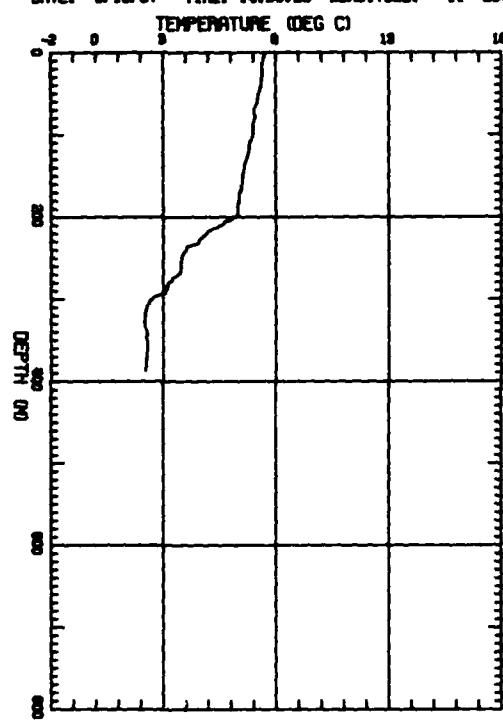
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 106 CHANNEL: 12 LATITUDE: 83 38.4
DATE: 5/18/87 TIME: 14:19:43 LONGITUDE: -10 46.1



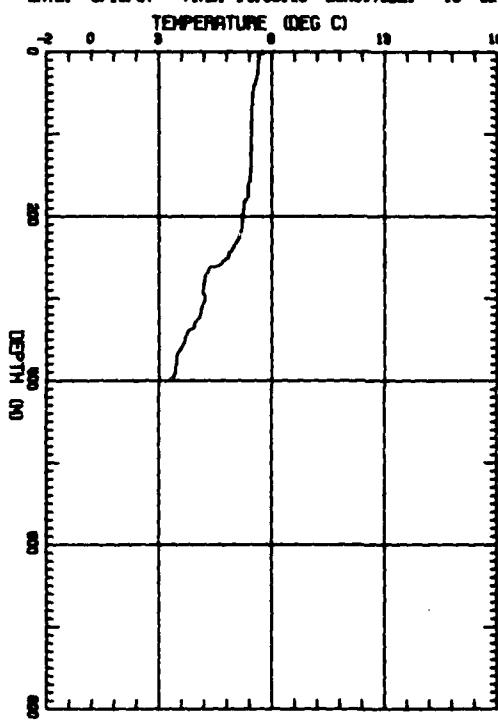
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 107 CHANNEL: 14 LATITUDE: 83 20.6
DATE: 5/18/87 TIME: 14:21:37 LONGITUDE: -10 52.6



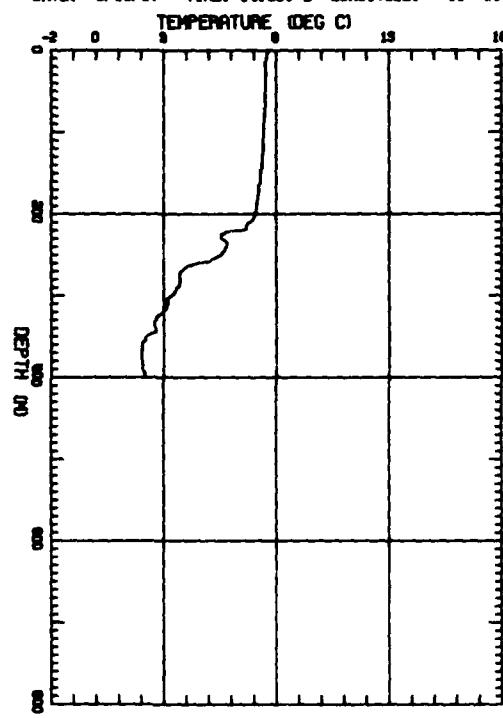
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 160 CHANNEL: 12 LATITUDE: 63 21.2
DATE: 5/18/87 TIME: 14:26:20 LONGITUDE: -10 20.4



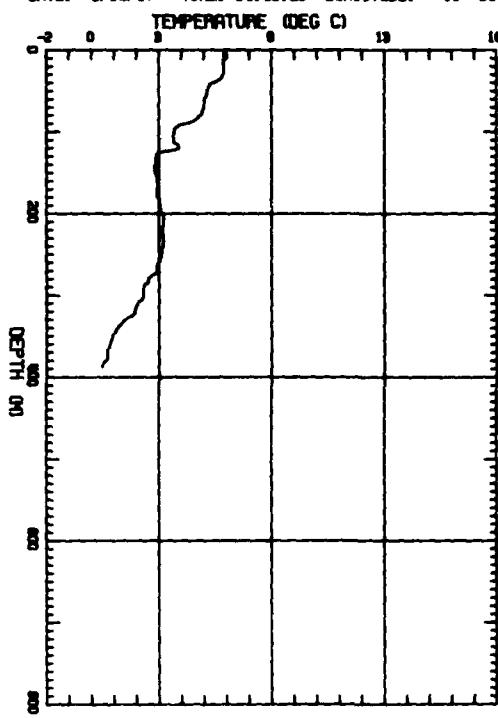
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 160 CHANNEL: 18 LATITUDE: 63 39.3
DATE: 5/18/87 TIME: 14:30:16 LONGITUDE: -10 52.3



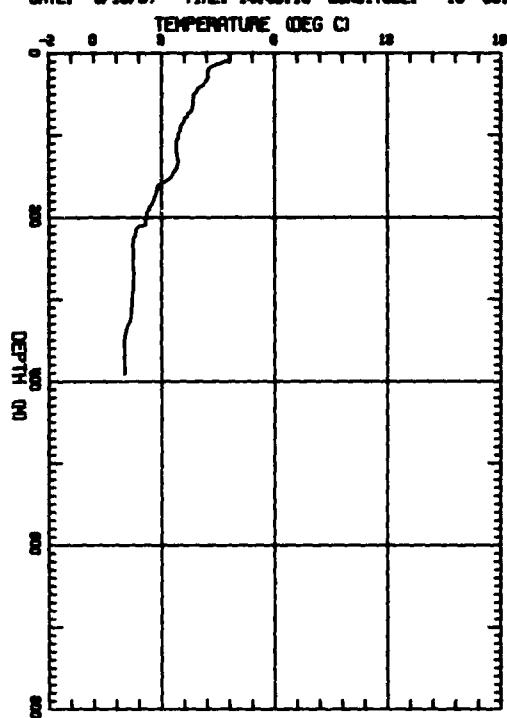
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 170 CHANNEL: 12 LATITUDE: 63 59.3
DATE: 5/18/87 TIME: 14:35:2 LONGITUDE: -10 51.9



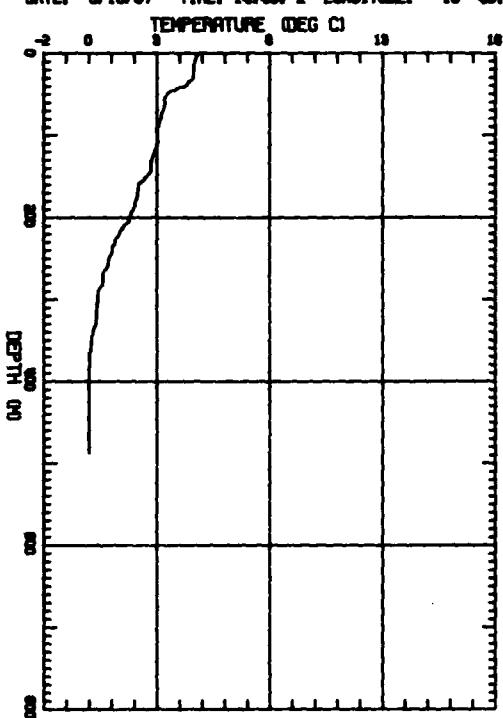
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 171 CHANNEL: 14 LATITUDE: 64 22.6
DATE: 5/18/87 TIME: 14:40:20 LONGITUDE: -10 50.6



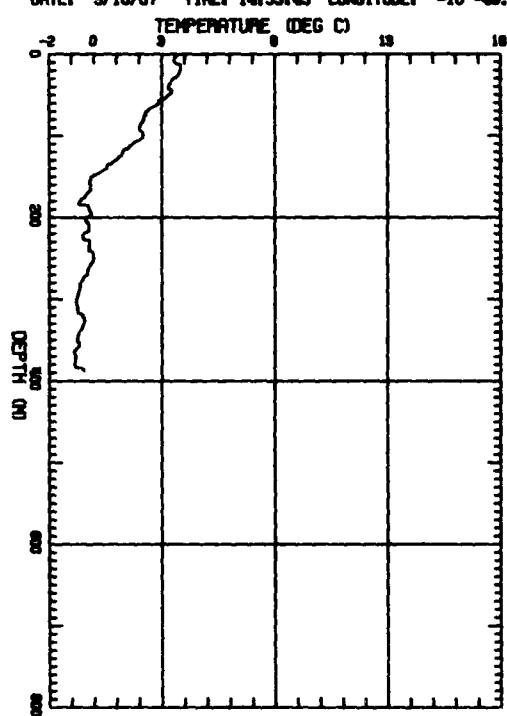
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 172 CHANNEL: 12 LATITUDE: 06 50.8
DATE: 5/18/87 TIME: 14:45:13 LONGITUDE: -10 49.4



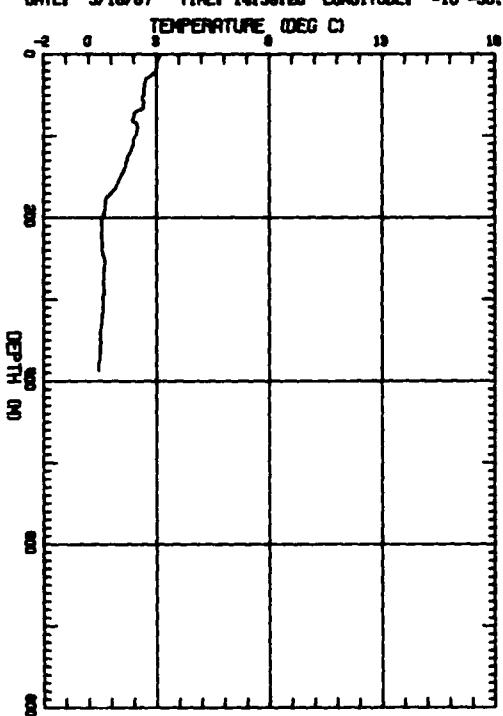
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 173 CHANNEL: 14 LATITUDE: 06 59.7
DATE: 5/18/87 TIME: 14:46:2 LONGITUDE: -10 49.8



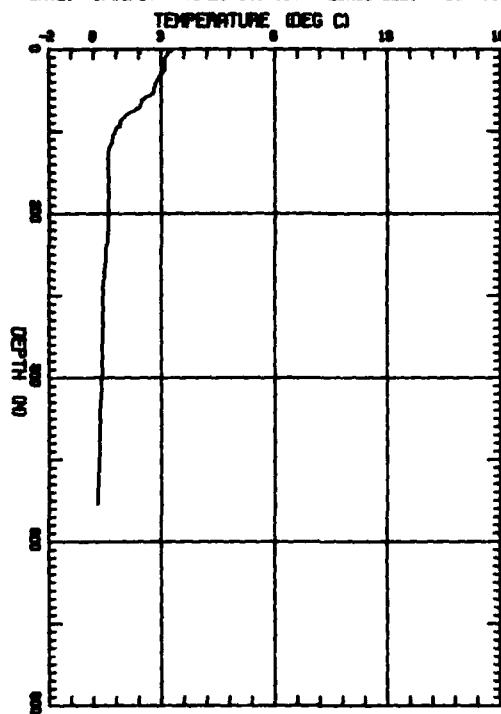
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 174 CHANNEL: 18 LATITUDE: 06 19.6
DATE: 5/18/87 TIME: 14:59:43 LONGITUDE: -10 49.7



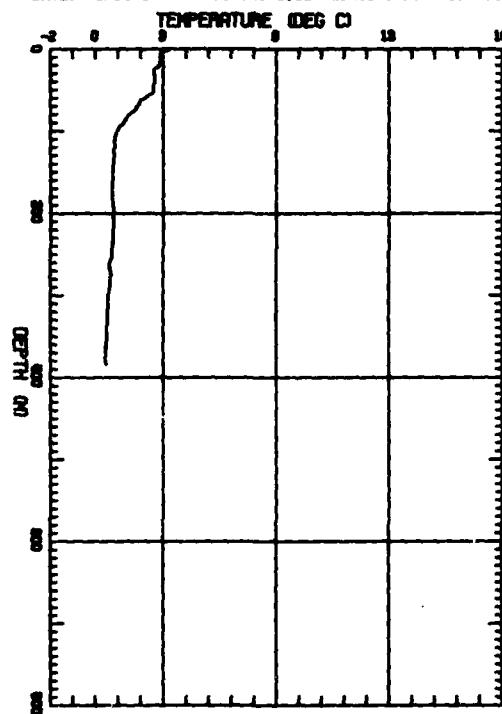
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 175 CHANNEL: 12 LATITUDE: 06 50.1
DATE: 5/18/87 TIME: 14:58:28 LONGITUDE: -10 50.0



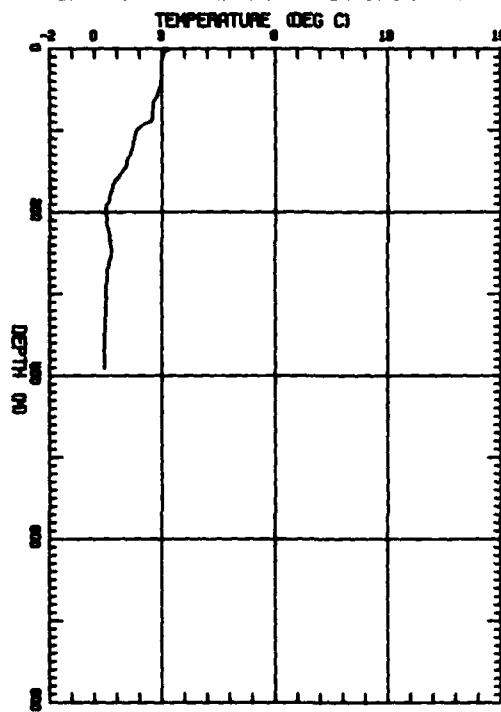
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 178 CHANNEL: 18 LATITUDE: 66 39.8
DATE: 5/18/87 TIME: 15:31:17 LONGITUDE: -10 51.3



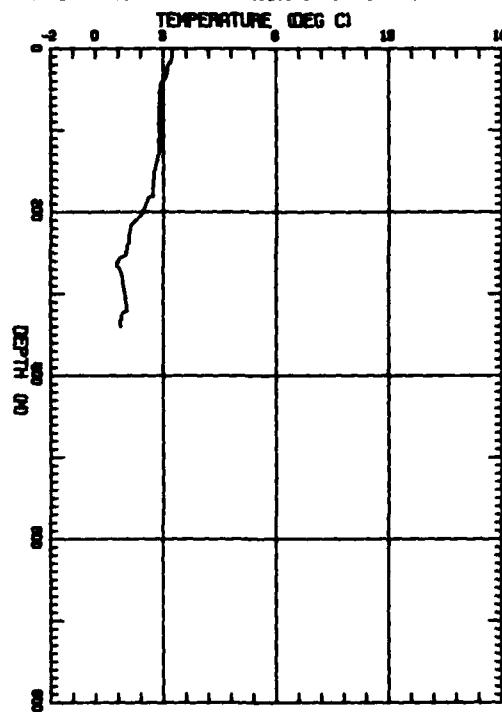
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 177 CHANNEL: 12 LATITUDE: 66 18.5
DATE: 5/18/87 TIME: 15:04:10 LONGITUDE: -10 51.8



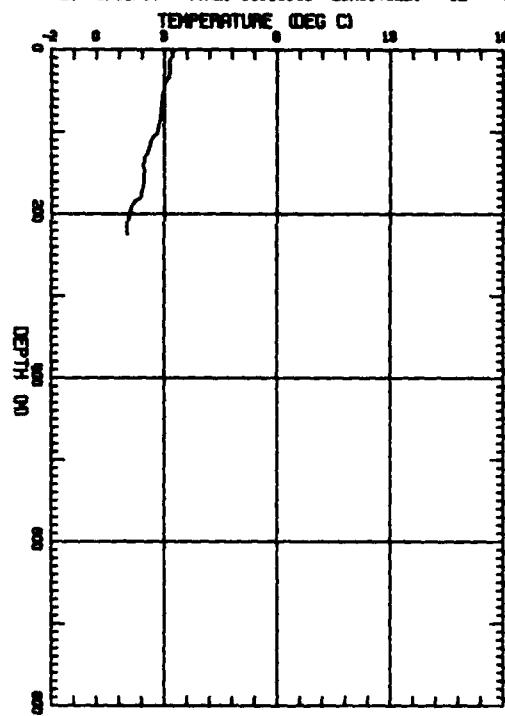
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 178 CHANNEL: 14 LATITUDE: 66 40.8
DATE: 5/18/87 TIME: 15:19:25 LONGITUDE: -10 51.8



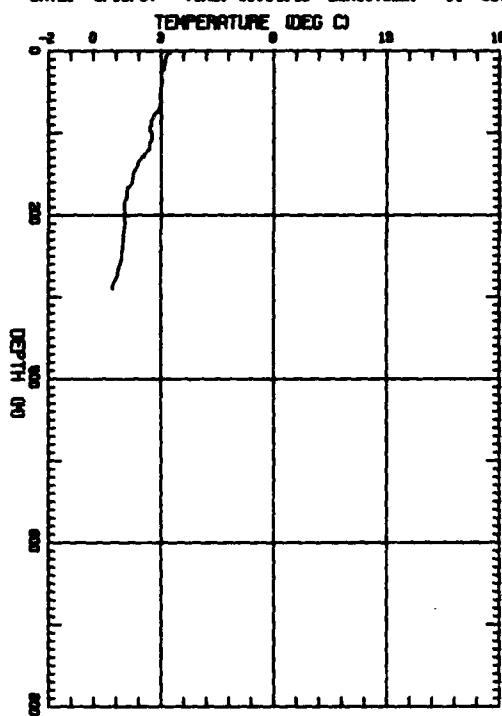
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 178 CHANNEL: 12 LATITUDE: 66 .5
DATE: 5/18/87 TIME: 15:25:55 LONGITUDE: -12 3.4



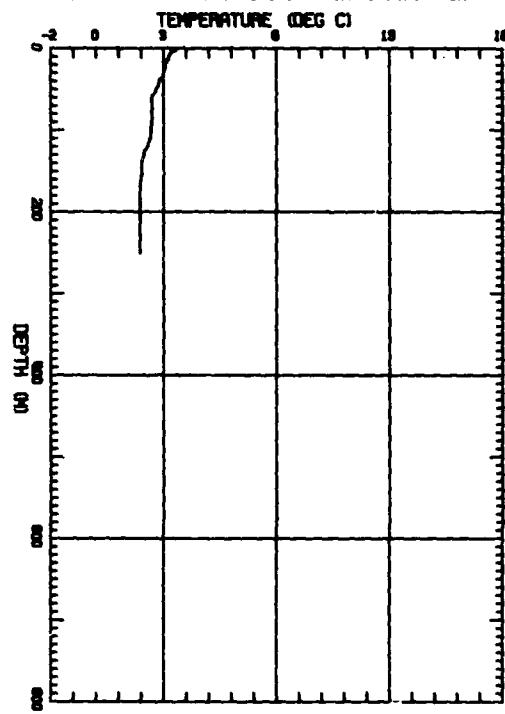
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 100 CHANNEL: 18 LATITUDE: 05 40.0
DATE: 5/18/87 TIME: 15:30:10 LONGITUDE: -12 -2



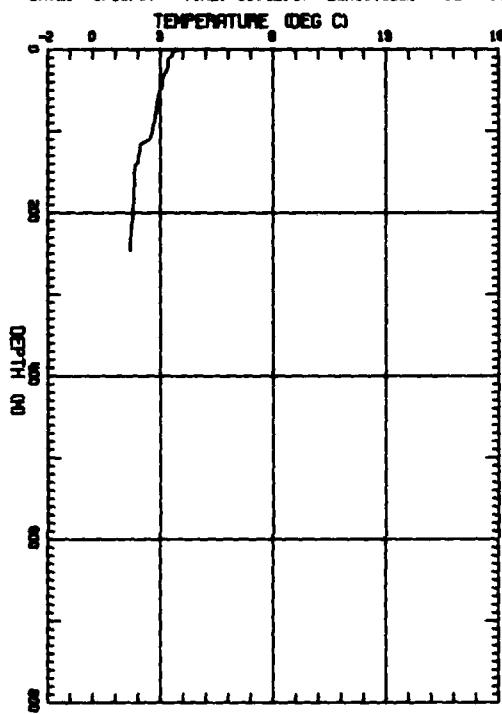
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 101 CHANNEL: 12 LATITUDE: 05 18.4
DATE: 5/18/87 TIME: 15:30:48 LONGITUDE: -11 -58.5



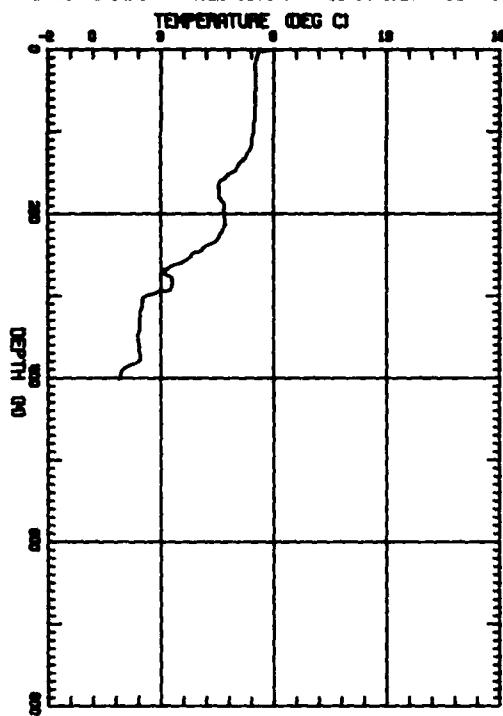
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 102 CHANNEL: 18 LATITUDE: 05 .4
DATE: 5/18/87 TIME: 15:30:32 LONGITUDE: -12 -.1



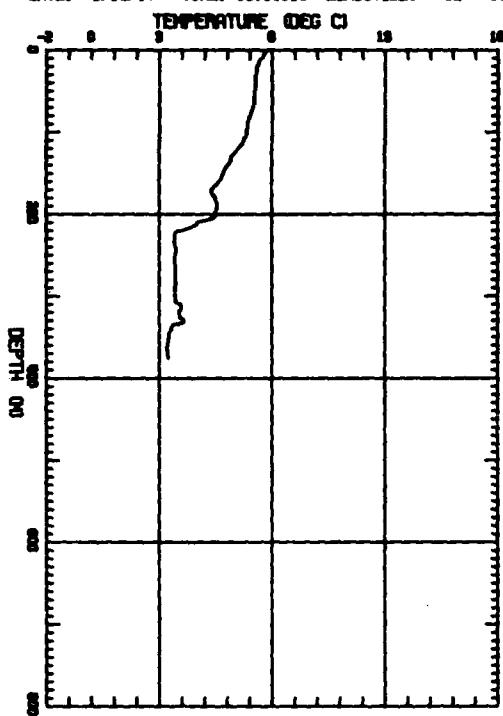
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 103 CHANNEL: 12 LATITUDE: 04 40.7
DATE: 5/18/87 TIME: 15:42:47 LONGITUDE: -12 -1.2



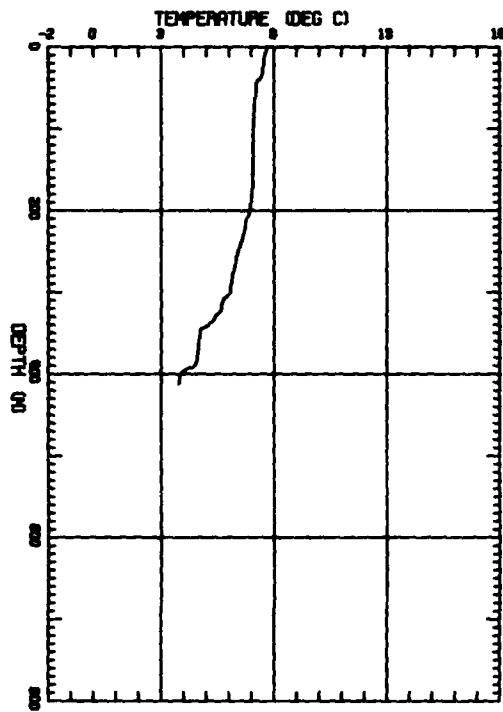
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 106 CHANNEL: 16 LATITUDE: 04 20.4
DATE: 5/10/87 TIME: 15:47:7 LONGITUDE: -12 -1.1



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 106 CHANNEL: 16 LATITUDE: 04 .5
DATE: 5/10/87 TIME: 15:51:26 LONGITUDE: -12 -1.1

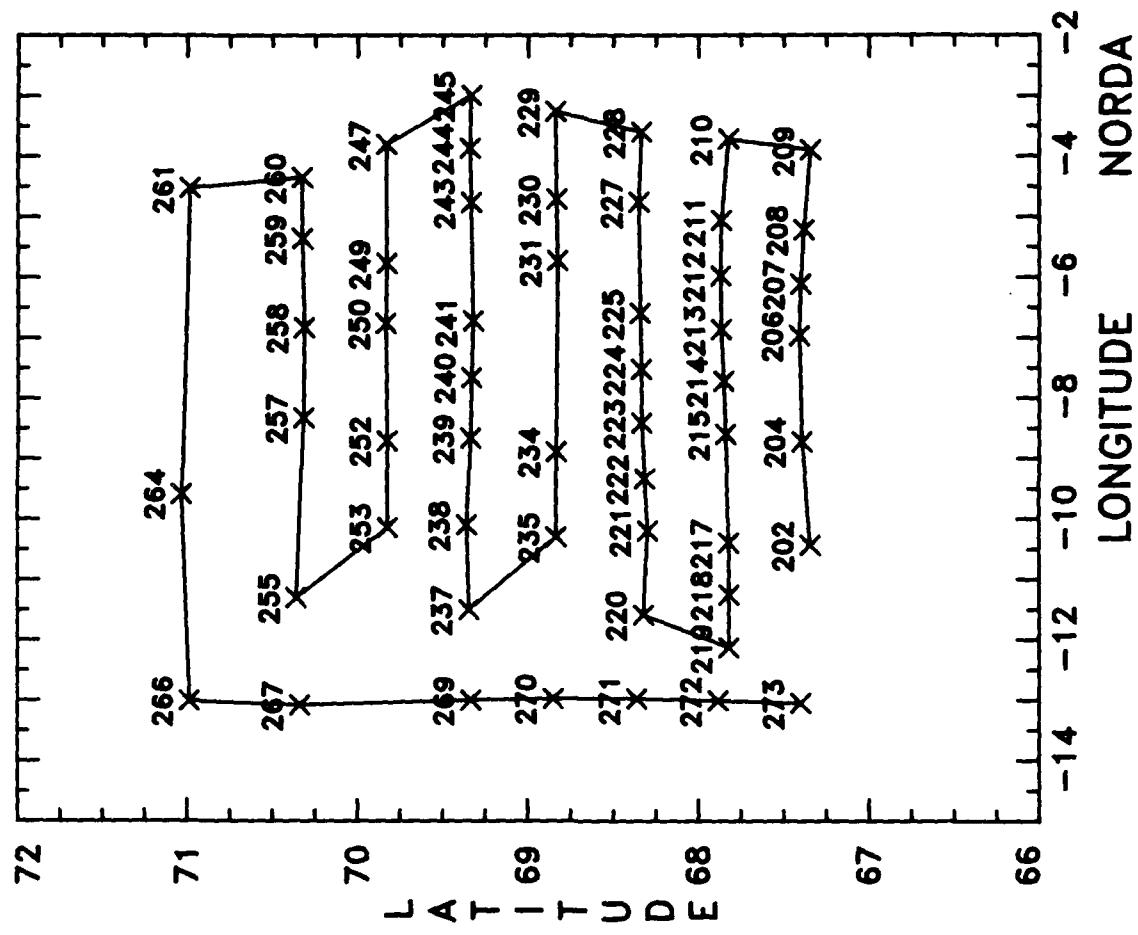


PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 107 CHANNEL: 16 LATITUDE: 03 20.5
DATE: 5/10/87 TIME: 16: 0: 2 LONGITUDE: -11 -59.1

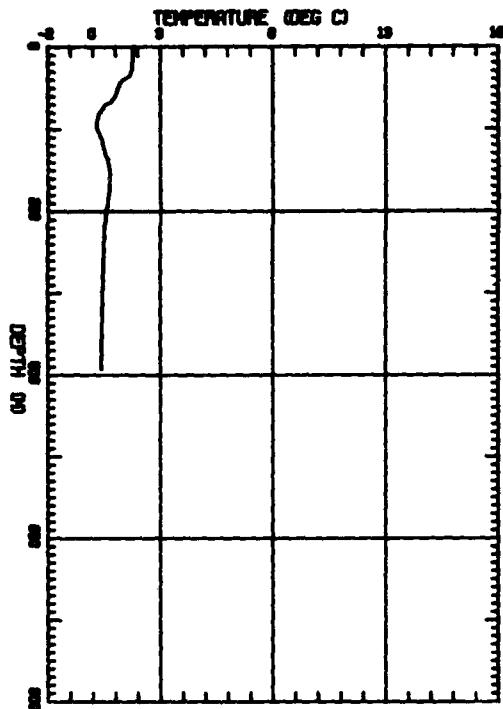


**Appendix C.
Drop Positions and Data Profiles, Flight 3,
20 May 1987, Jan Mayen Frontal Region.**

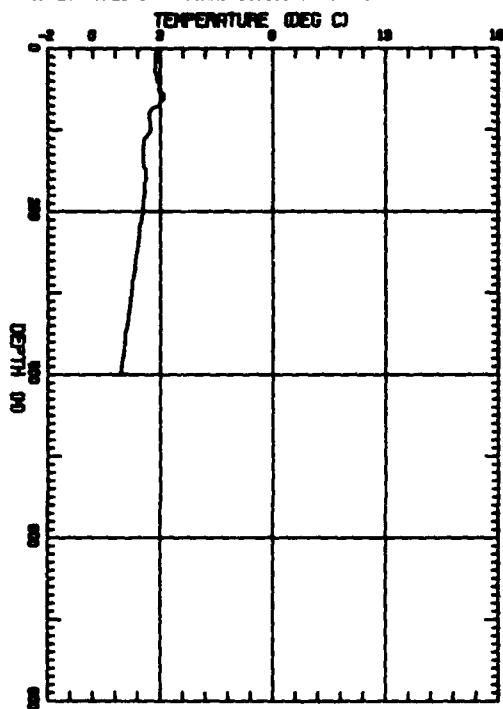
55 AXBTs 20 May 1987



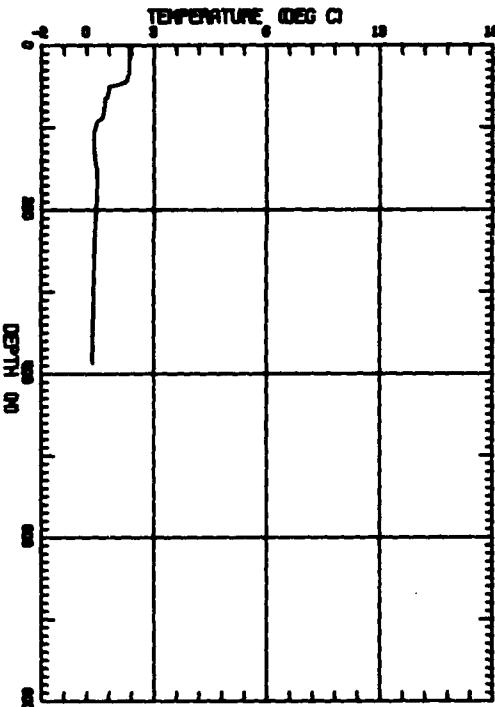
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 202 CHANNEL: 16 LATITUDE: 67 20.5
DATE: 5/20/07 TIME: 09:36:38 LONGITUDE: -10 48.9



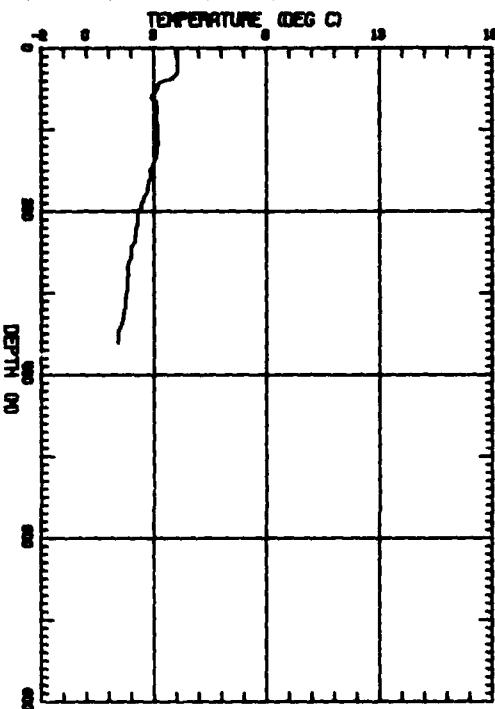
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 203 CHANNEL: 12 LATITUDE: 67 20.6
DATE: 5/20/07 TIME: 10:10:15 LONGITUDE: -6 57.0



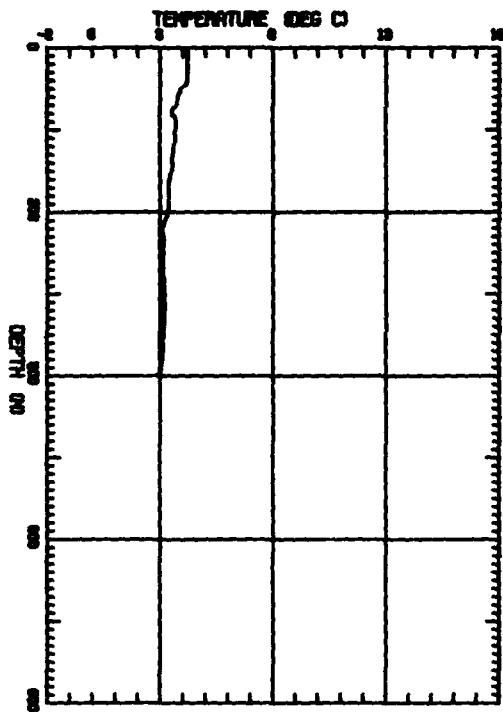
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 204 CHANNEL: 16 LATITUDE: 67 22.5
DATE: 5/20/07 TIME: 10:22:25 LONGITUDE: -6 43.6



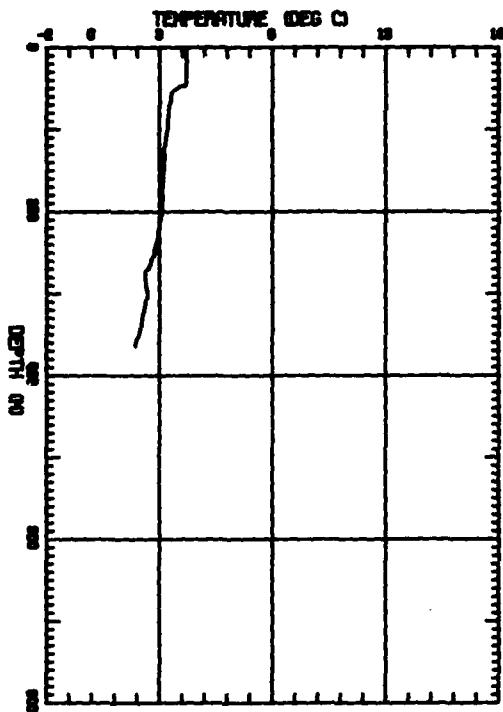
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 207 CHANNEL: 16 LATITUDE: 67 22.6
DATE: 5/20/07 TIME: 10:14:15 LONGITUDE: -6 46.0



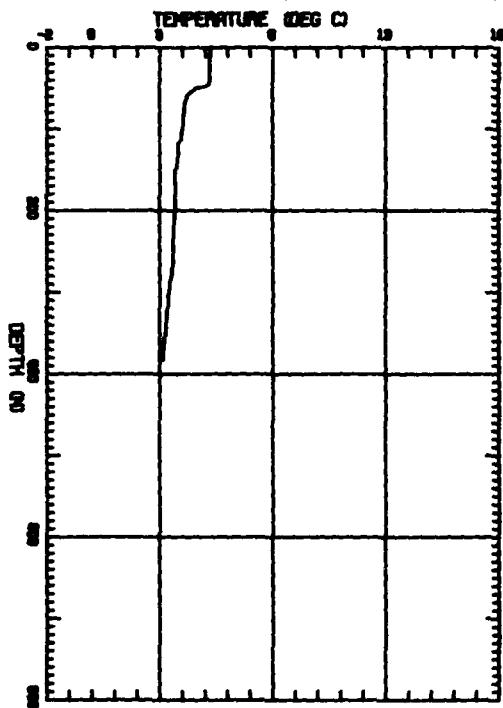
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 208 CHANNEL: 18 LATITUDE: 67 22.7
DATE: 5/20/87 TIME: 10:36:27 LONGITUDE: -3 -15.1



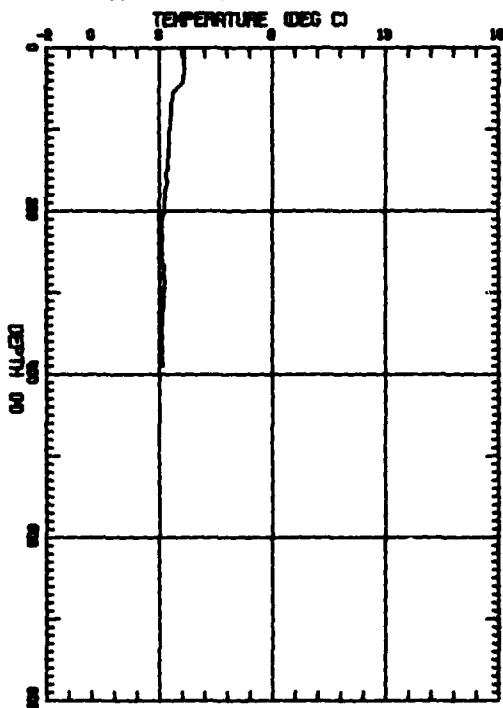
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 208 CHANNEL: 12 LATITUDE: 67 20.4
DATE: 5/20/87 TIME: 10:36:30 LONGITUDE: -3 -55.0



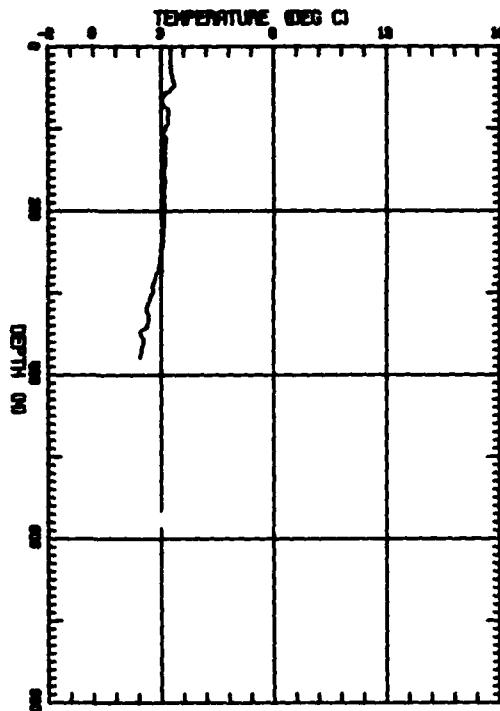
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 210 CHANNEL: 18 LATITUDE: 67 00.3
DATE: 5/20/87 TIME: 10:36:47 LONGITUDE: -3 -63.1



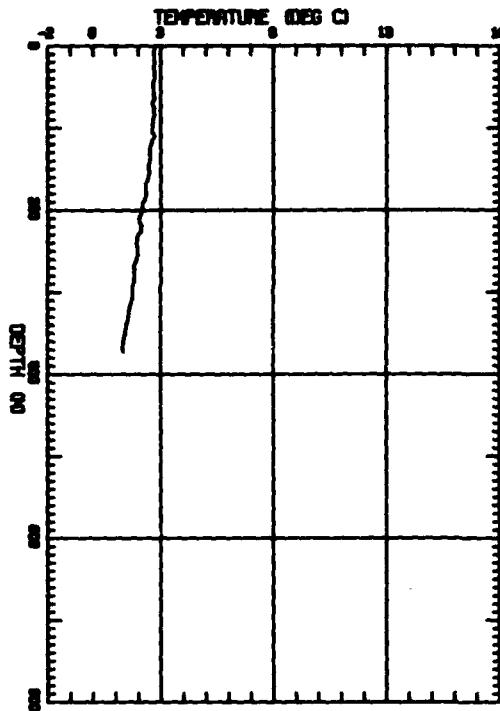
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 211 CHANNEL: 18 LATITUDE: 67 51.0
DATE: 5/20/87 TIME: 10:40:34 LONGITUDE: -3 -8.7



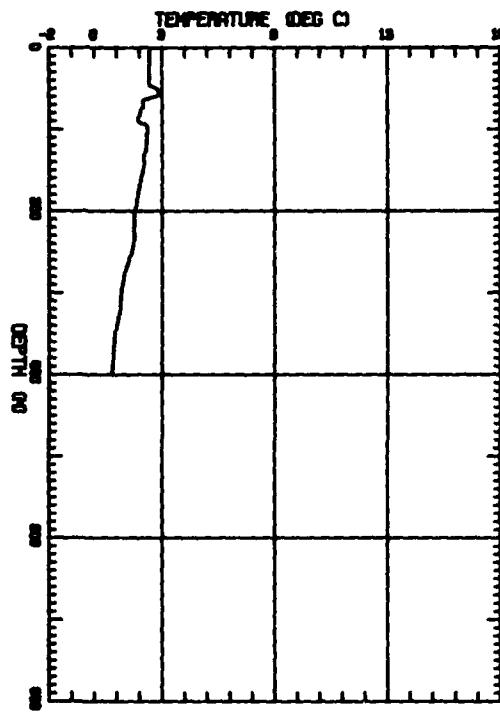
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 212 CHANNEL: 12 LATITUDE: 67 52.1
DATE: 5/20/87 TIME: 10:00:55 LONGITUDE: -6 -58.6



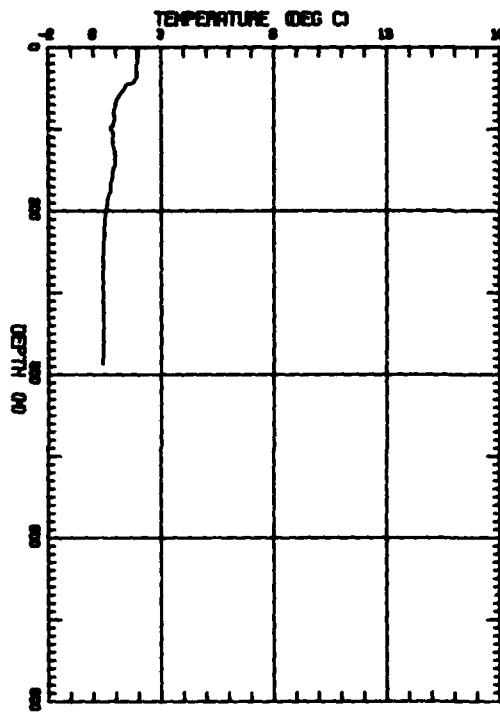
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 213 CHANNEL: 16 LATITUDE: 67 51.8
DATE: 5/20/87 TIME: 10:00: 3 LONGITUDE: -6 -51.8



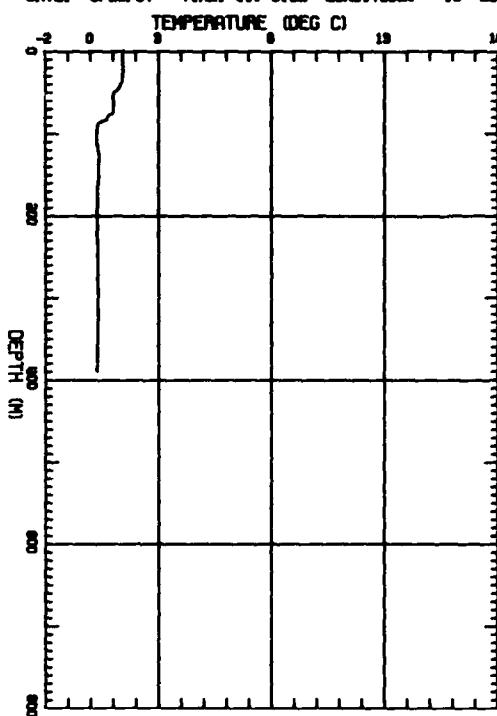
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 214 CHANNEL: 18 LATITUDE: 67 51.0
DATE: 5/20/87 TIME: 10:59:10 LONGITUDE: -7 -49.6



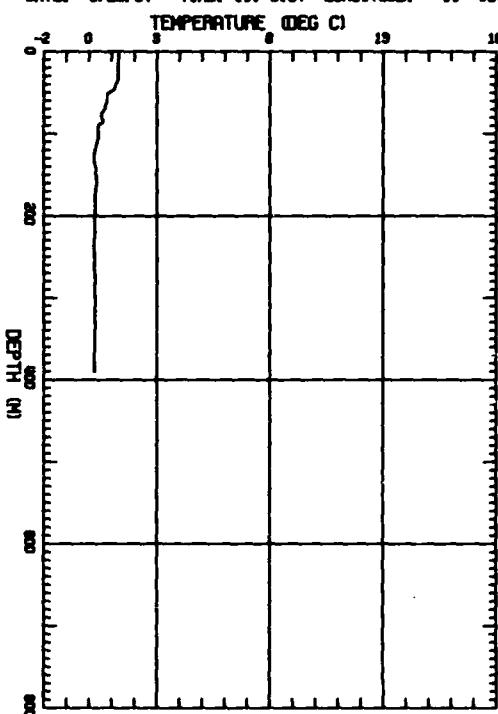
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 215 CHANNEL: 12 LATITUDE: 67 50.8
DATE: 5/20/87 TIME: 10:57:22 LONGITUDE: -6 -58.0



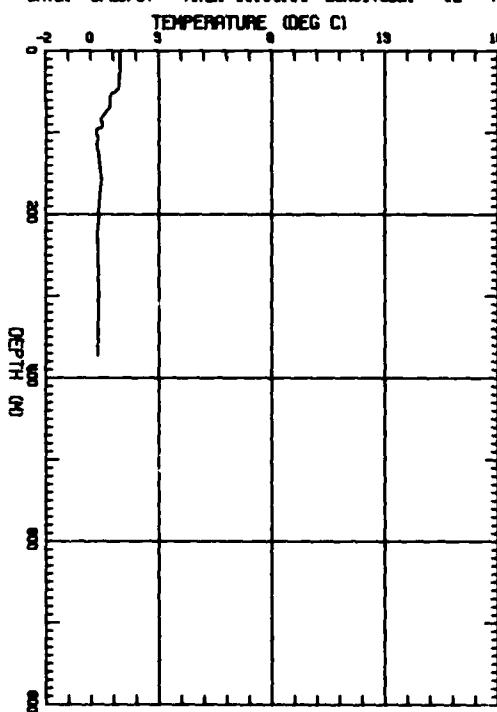
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 217 CHANNEL: 16 LATITUDE: 67 48.2
DATE: 5/20/87 TIME: 11:51:52 LONGITUDE: -10 23.7



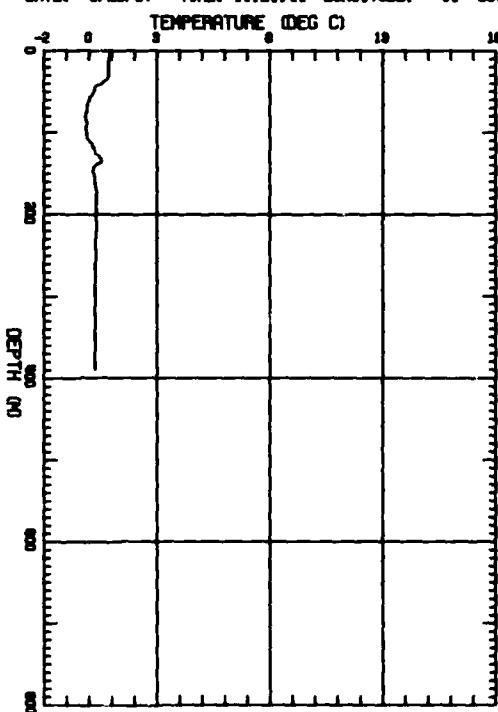
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 218 CHANNEL: 12 LATITUDE: 67 48.1
DATE: 5/20/87 TIME: 11:01:57 LONGITUDE: -11 15.4



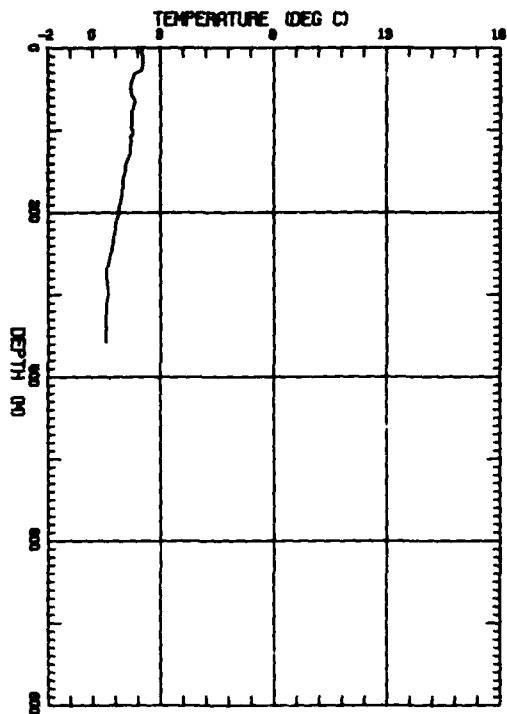
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 219 CHANNEL: 16 LATITUDE: 67 48.2
DATE: 5/20/87 TIME: 11:18:14 LONGITUDE: -12 07.8



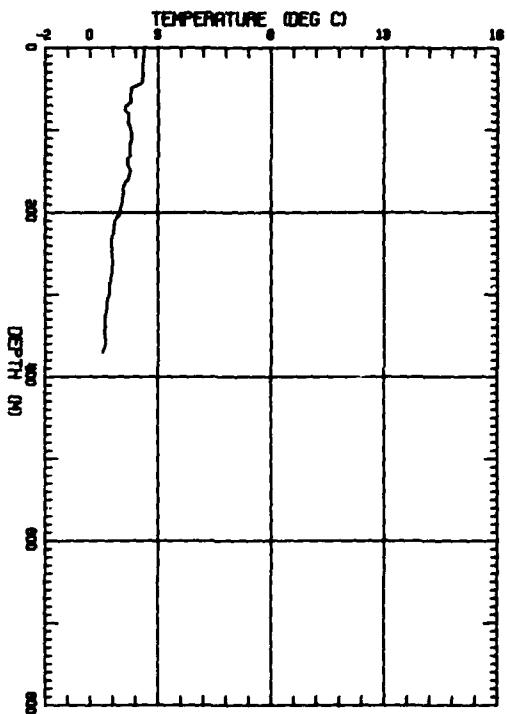
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 220 CHANNEL: 16 LATITUDE: 68 19.3
DATE: 5/20/87 TIME: 11:21:44 LONGITUDE: -11 35.1



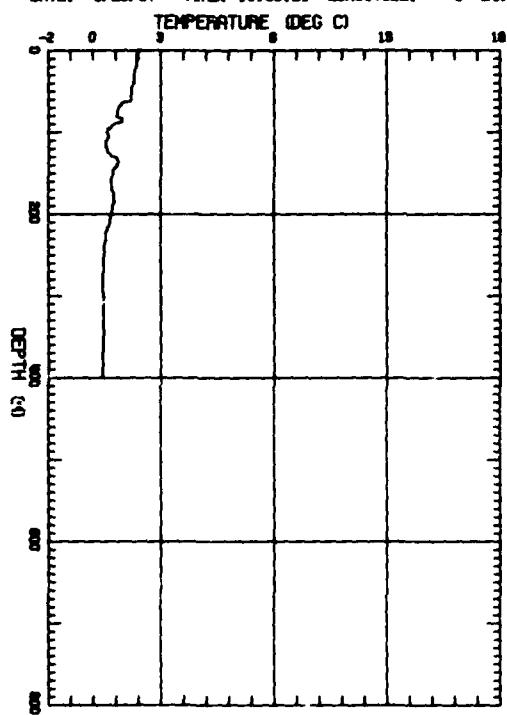
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 221 CHANNEL: 12 LATITUDE: 68 17.8
DATE: 5/20/87 TIME: 11:27:22 LONGITUDE: -10 -11.7



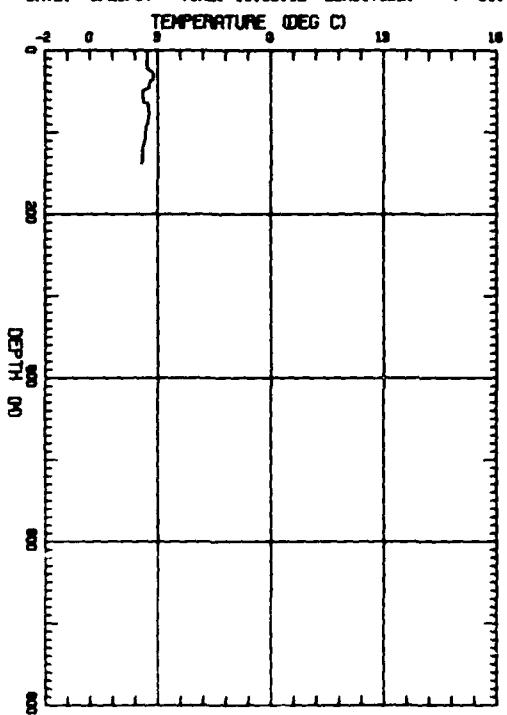
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 222 CHANNEL: 14 LATITUDE: 68 18.8
DATE: 5/20/87 TIME: 11:31:10 LONGITUDE: -9 -19.9



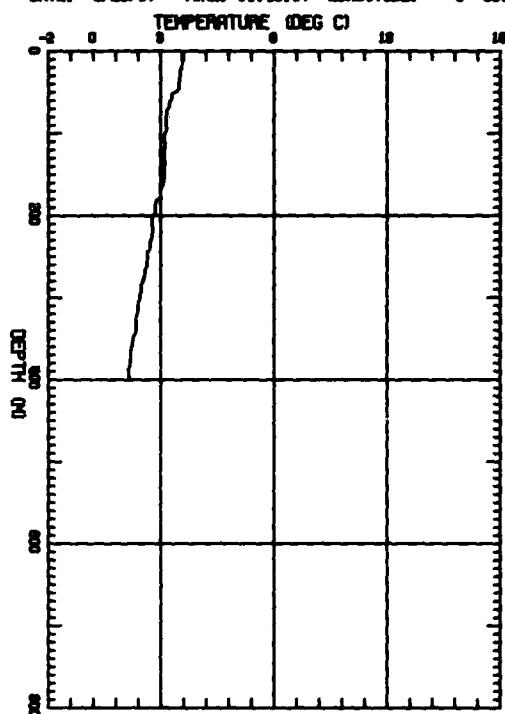
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 223 CHANNEL: 18 LATITUDE: 68 20.0
DATE: 5/20/87 TIME: 11:35:21 LONGITUDE: -8 -24.6



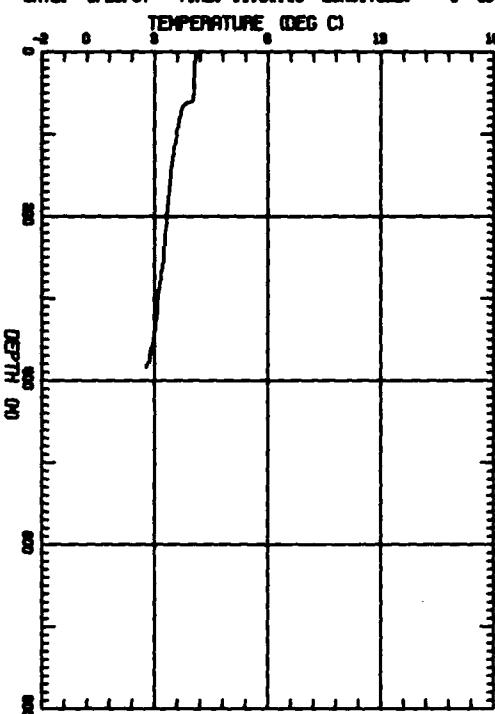
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 224 CHANNEL: 12 LATITUDE: 68 20.1
DATE: 5/20/87 TIME: 11:39:12 LONGITUDE: -7 -31.4



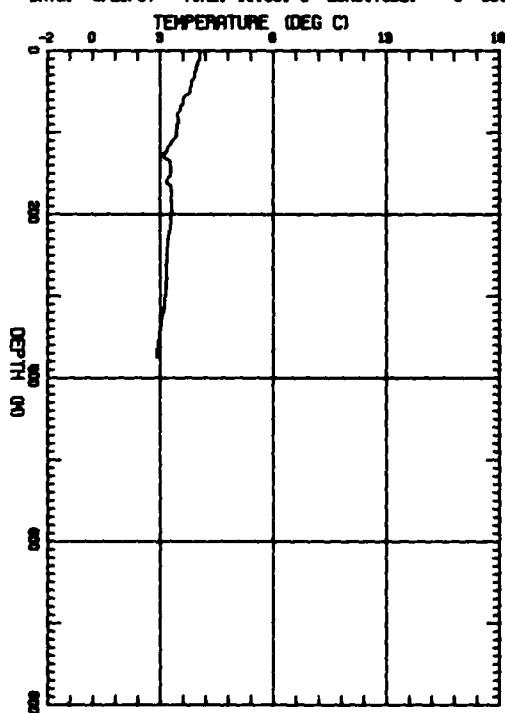
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 228 CHANNEL: 14 LATITUDE: 00 20.5
DATE: 5/20/87 TIME: 11:59:17 LONGITUDE: -3 -35.6



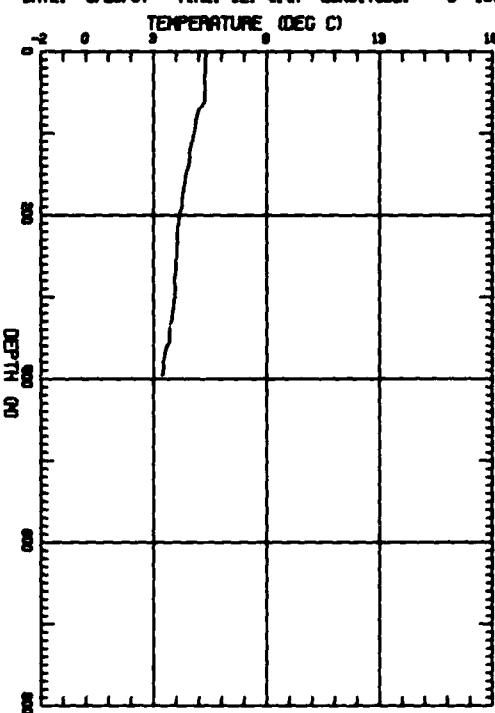
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 227 CHANNEL: 12 LATITUDE: 00 20.0
DATE: 5/20/87 TIME: 11:51:18 LONGITUDE: -3 -35.6



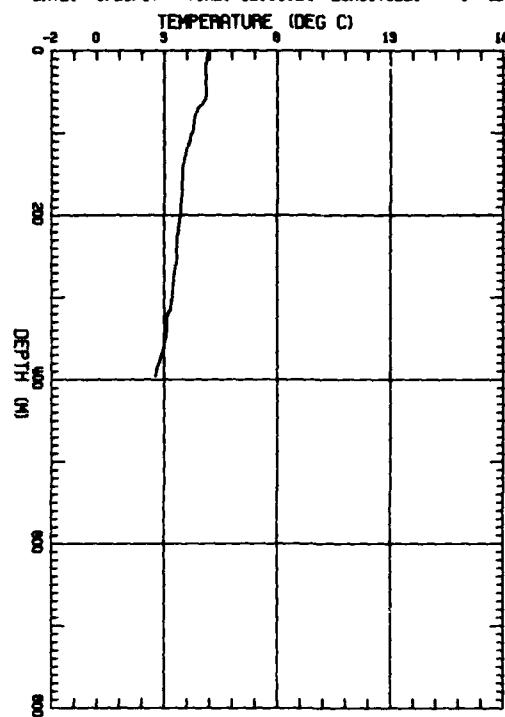
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 228 CHANNEL: 14 LATITUDE: 00 20.0
DATE: 5/20/87 TIME: 11:58:0 LONGITUDE: -3 -35.6



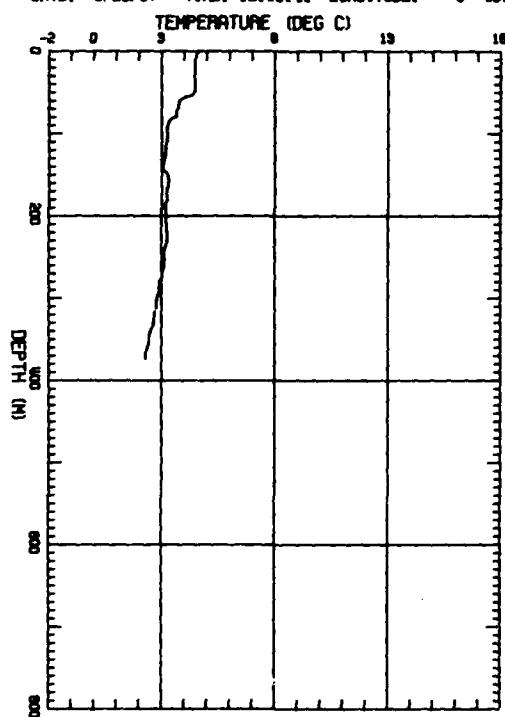
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 228 CHANNEL: 16 LATITUDE: 00 50.2
DATE: 5/20/87 TIME: 12:4:47 LONGITUDE: -3 -35.6



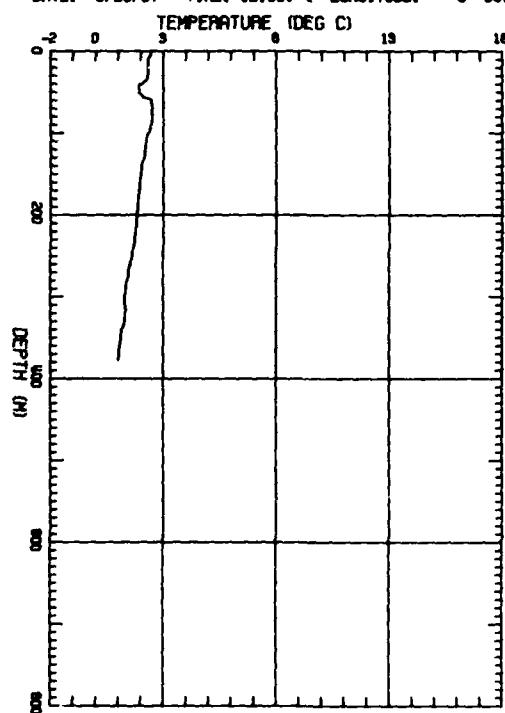
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 230 CHANNEL: 12 LATITUDE: 88 49.0
DATE: 5/20/87 TIME: 12:11:24 LONGITUDE: -4 42.6



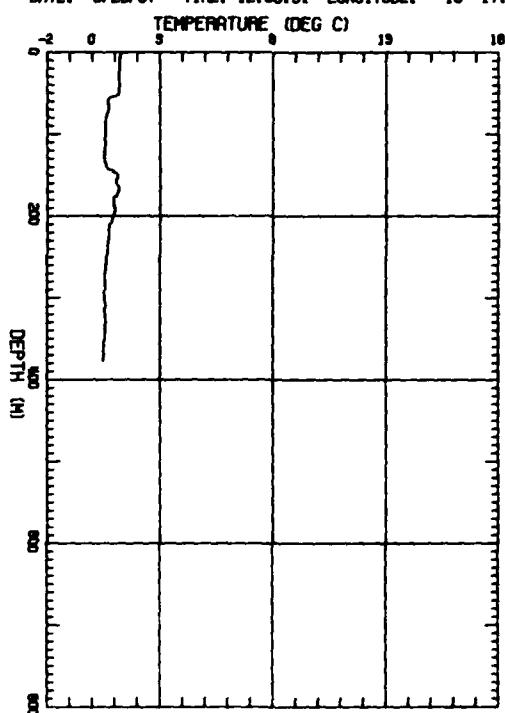
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 231 CHANNEL: 14 LATITUDE: 88 49.5
DATE: 5/20/87 TIME: 12:15:41 LONGITUDE: -5 43.6



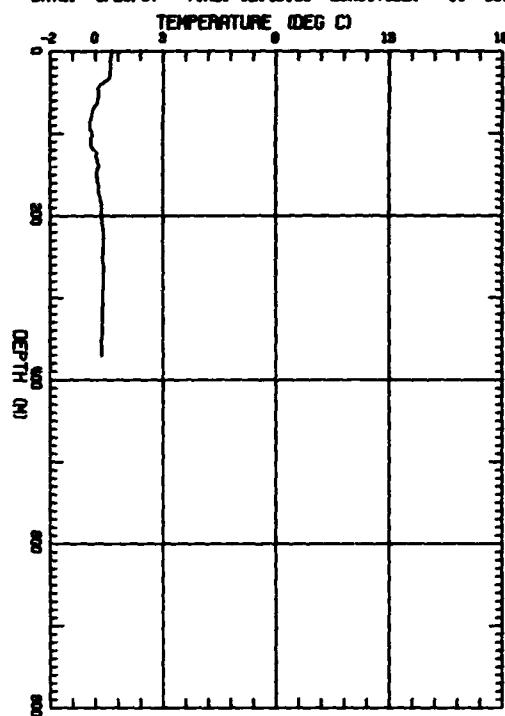
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 234 CHANNEL: 14 LATITUDE: 88 50.0
DATE: 5/20/87 TIME: 12:30:41 LONGITUDE: -8 53.4



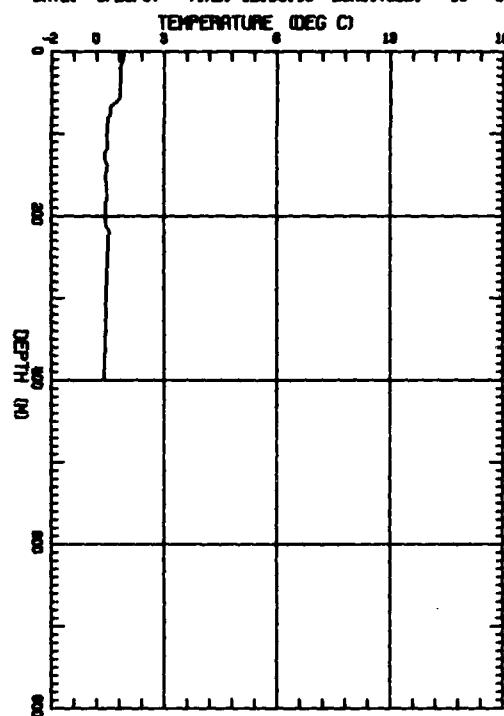
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 235 CHANNEL: 18 LATITUDE: 88 48.9
DATE: 5/20/87 TIME: 12:36:31 LONGITUDE: -10 17.6



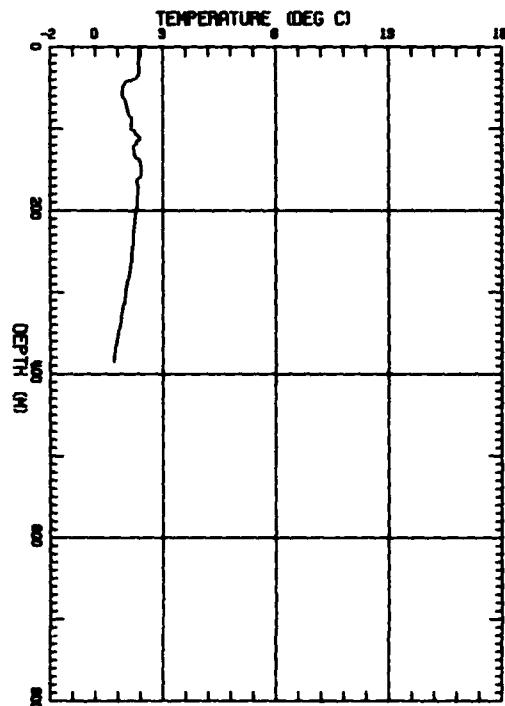
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 237 CHANNEL: 14 LATITUDE: 00 20.6
DATE: 5/20/87 TIME: 12:48:30 LONGITUDE: -11 -30.0



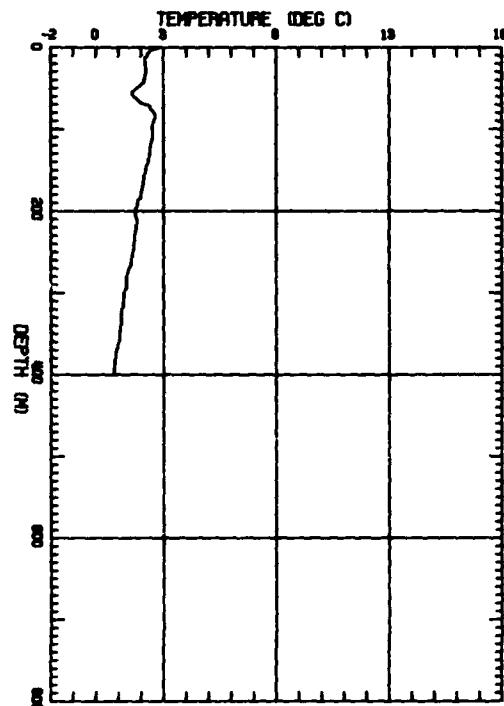
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 238 CHANNEL: 16 LATITUDE: 00 21.4
DATE: 5/20/87 TIME: 12:53:10 LONGITUDE: -10 -6.0



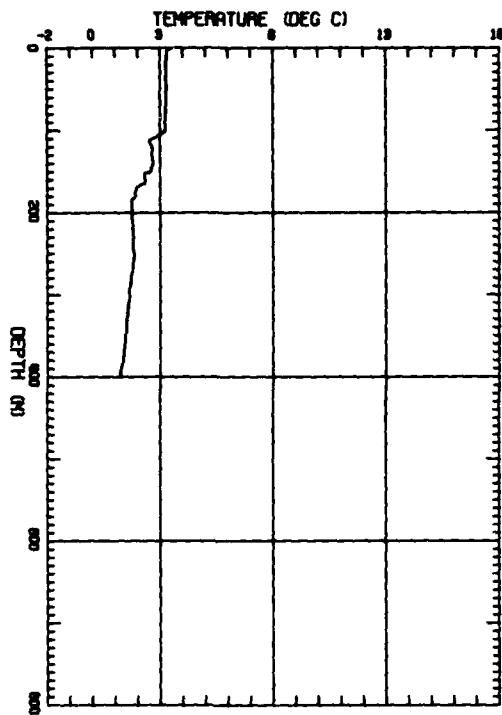
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 239 CHANNEL: 12 LATITUDE: 00 20.1
DATE: 5/20/87 TIME: 13: 0:36 LONGITUDE: -8 -39.7



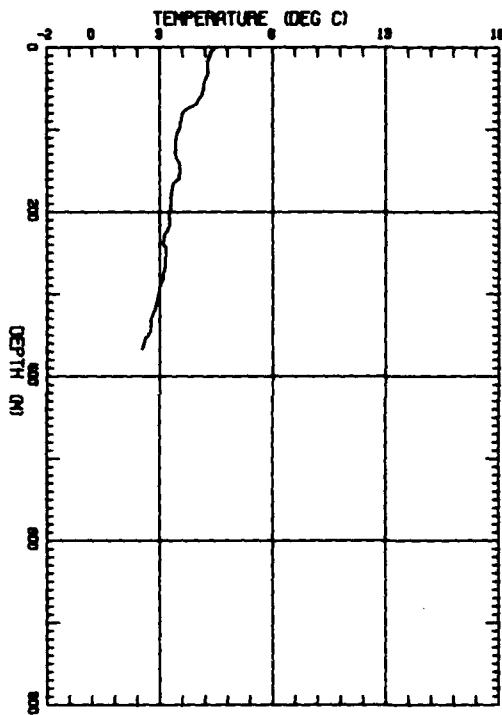
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 240 CHANNEL: 14 LATITUDE: 00 19.7
DATE: 5/20/87 TIME: 13: 4:42 LONGITUDE: -7 -39.6



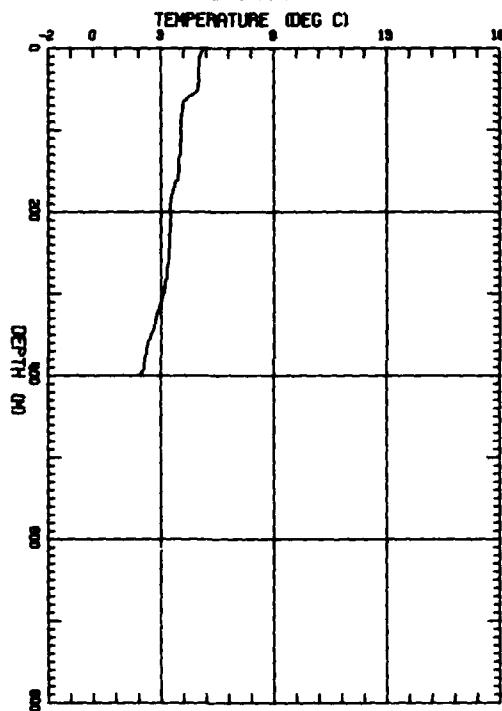
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 241 CHANNEL: 18 LATITUDE: 00 19.2
DATE: 5/20/87 TIME: 13:02:21 LONGITUDE: -643.2



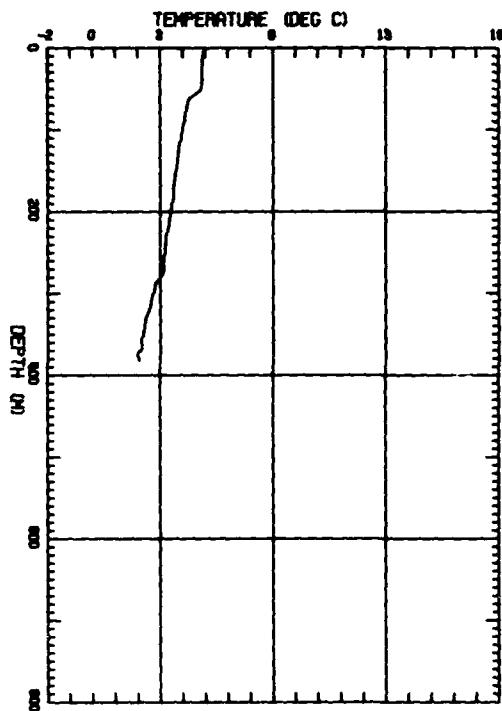
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 243 CHANNEL: 18 LATITUDE: 00 19.8
DATE: 5/20/87 TIME: 13:16:17 LONGITUDE: -4 48.1



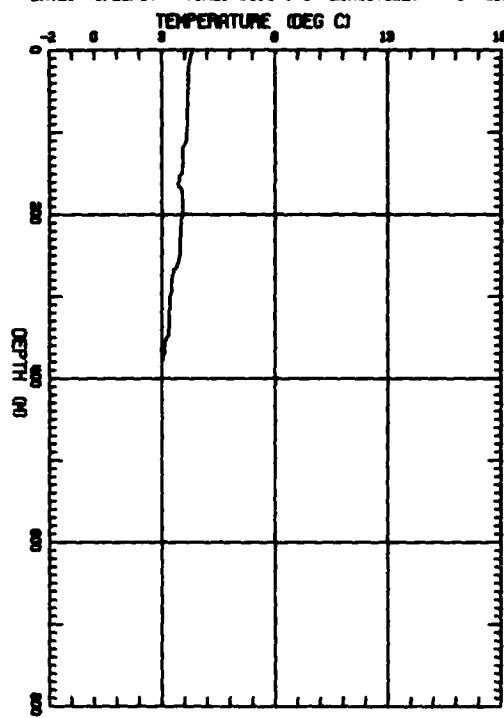
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 244 CHANNEL: 18 LATITUDE: 00 20.3
DATE: 5/20/87 TIME: 13:20:0 LONGITUDE: -3 52.1



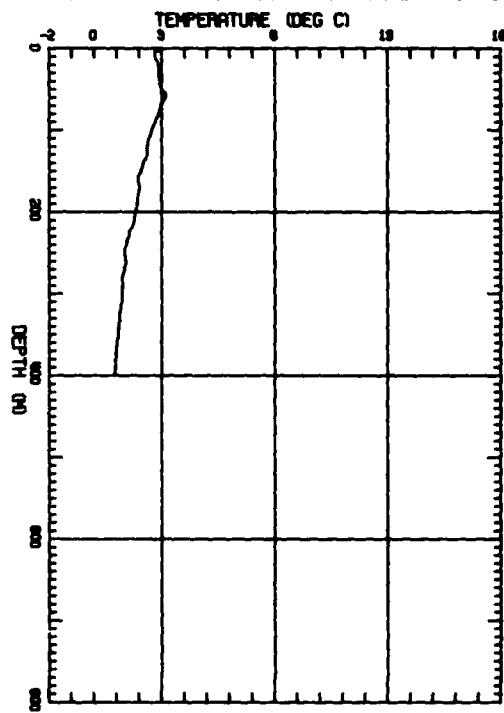
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 245 CHANNEL: 12 LATITUDE: 00 19.9
DATE: 5/20/87 TIME: 13:25:39 LONGITUDE: -2 58.6



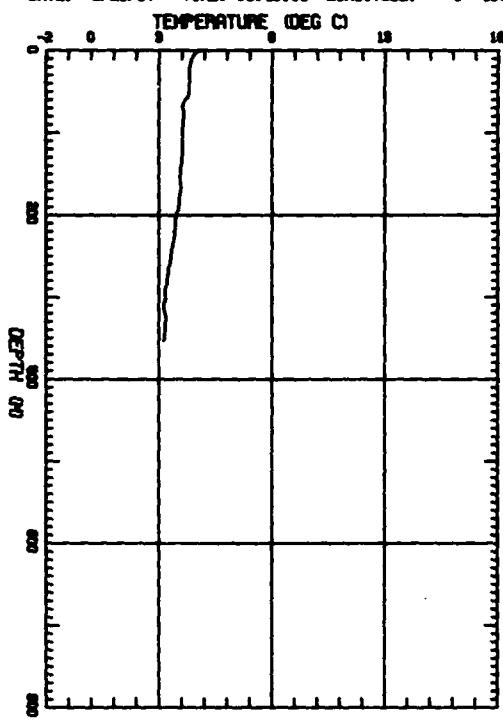
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 267 CHANNEL: 18 LATITUDE: 08 49.6
DATE: 5/20/87 TIME: 13:57:5 LONGITUDE: -5 48.3



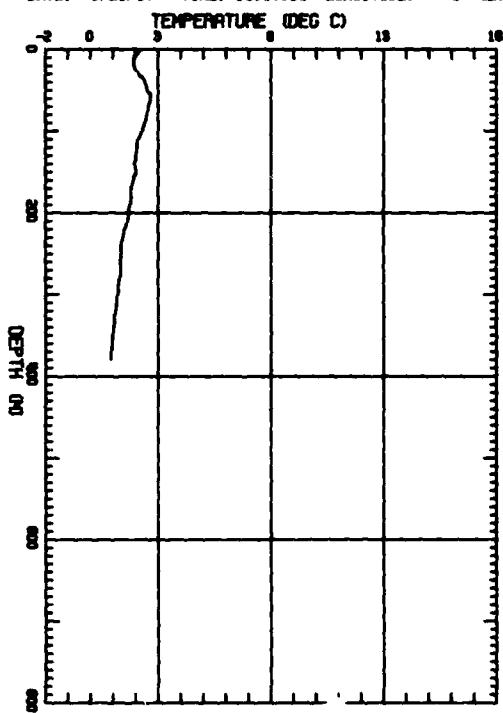
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 268 CHANNEL: 18 LATITUDE: 08 49.6
DATE: 5/20/87 TIME: 13:49:28 LONGITUDE: -5 48.3



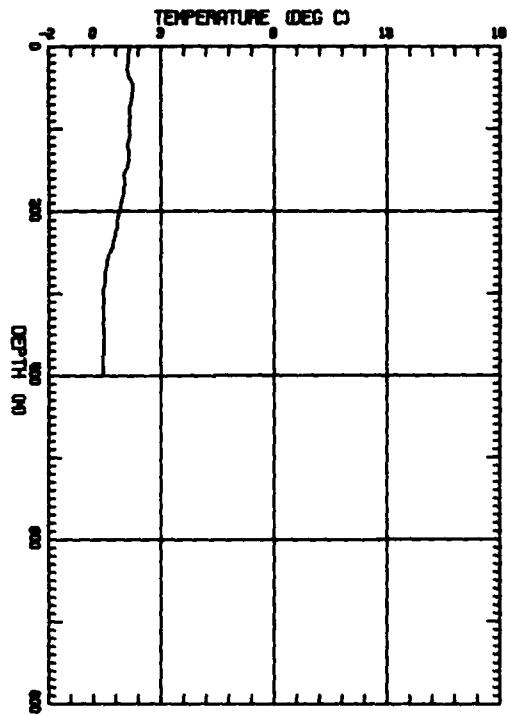
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 269 CHANNEL: 18 LATITUDE: 08 49.6
DATE: 5/20/87 TIME: 13:45:15 LONGITUDE: -5 48.3



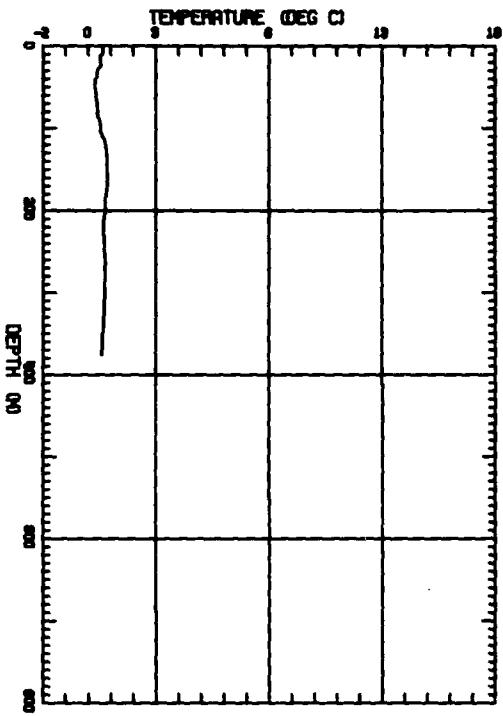
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 270 CHANNEL: 18 LATITUDE: 08 49.6
DATE: 5/20/87 TIME: 13:57:50 LONGITUDE: -5 42.5



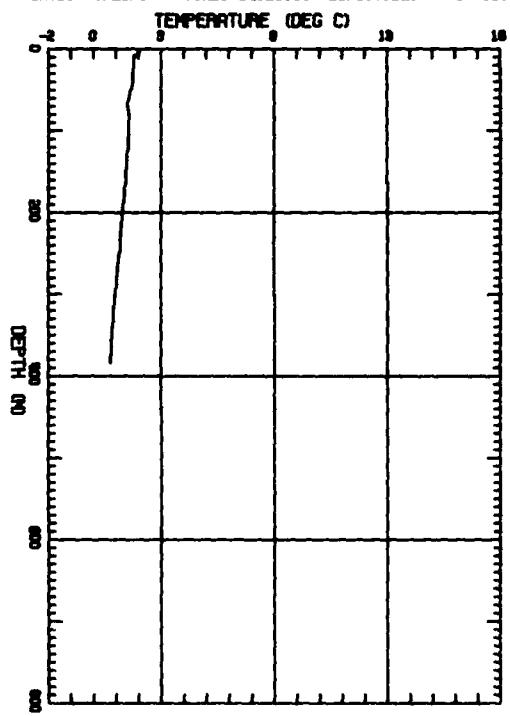
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 259 CHANNEL: 16 LATITUDE: 80 49.3
DATE: 5/20/87 TIME: 14:45 LONGITUDE: -10 -6.5



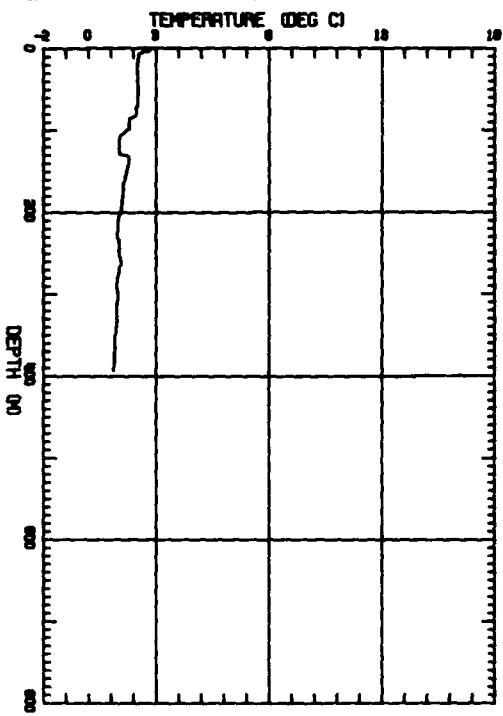
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 255 CHANNEL: 16 LATITUDE: 70 21.5
DATE: 5/20/87 TIME: 14:16:29 LONGITUDE: -11 -16.1



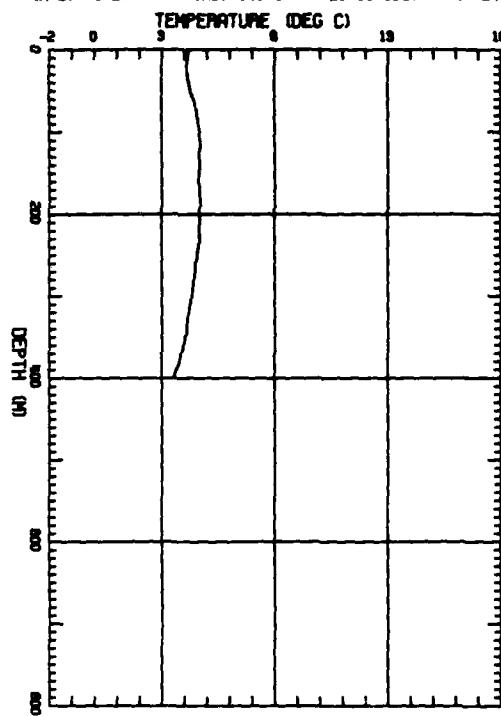
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 257 CHANNEL: 14 LATITUDE: 70 19.0
DATE: 5/20/87 TIME: 14:29:30 LONGITUDE: -6 -19.3



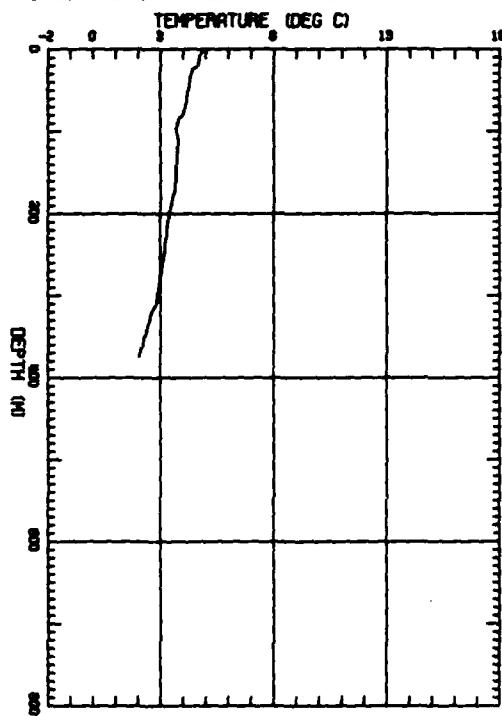
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 258 CHANNEL: 16 LATITUDE: 70 18.6
DATE: 5/20/87 TIME: 14:35:14 LONGITUDE: -6 -49.7



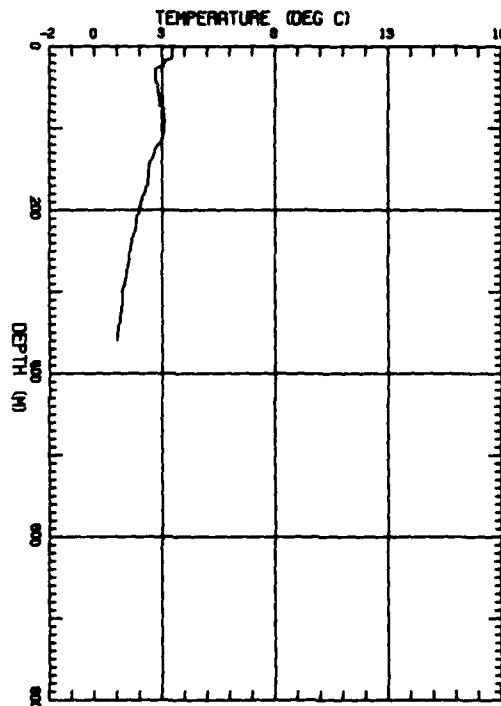
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 260 CHANNEL: 12 LATITUDE: 70 18.4
DATE: 5/20/87 TIME: 14:41:1 LONGITUDE: -5 -21.5



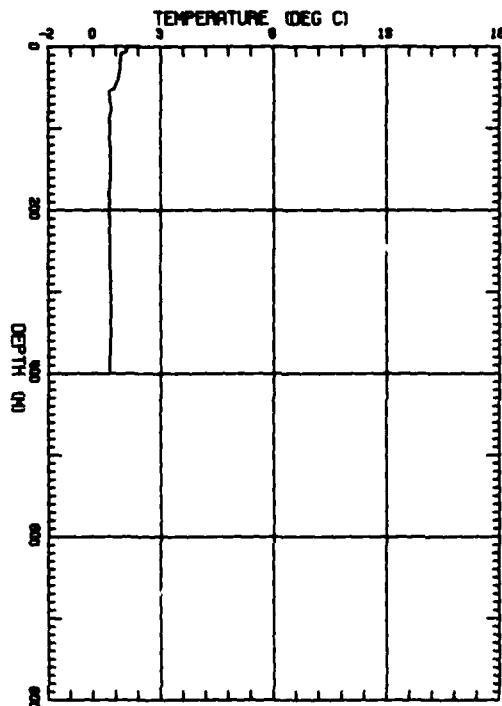
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 260 CHANNEL: 16 LATITUDE: 70 19.5
DATE: 5/20/87 TIME: 14:45:8 LONGITUDE: -4 -21.1



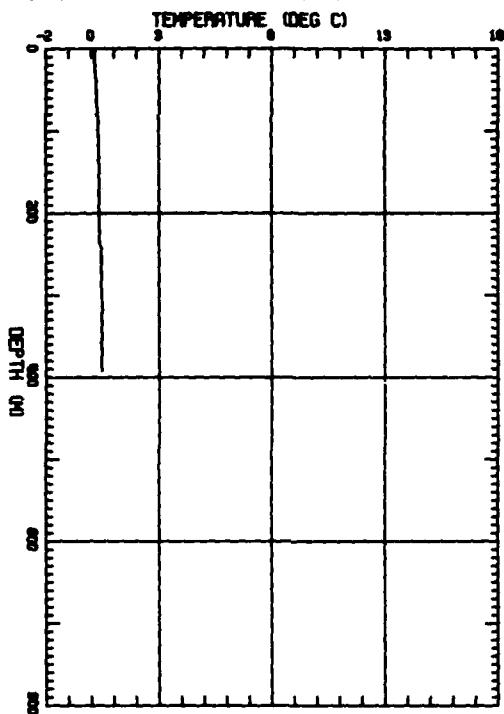
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 261 CHANNEL: 16 LATITUDE: 70 58.0
DATE: 5/20/87 TIME: 14:57:42 LONGITUDE: -4 -31.3



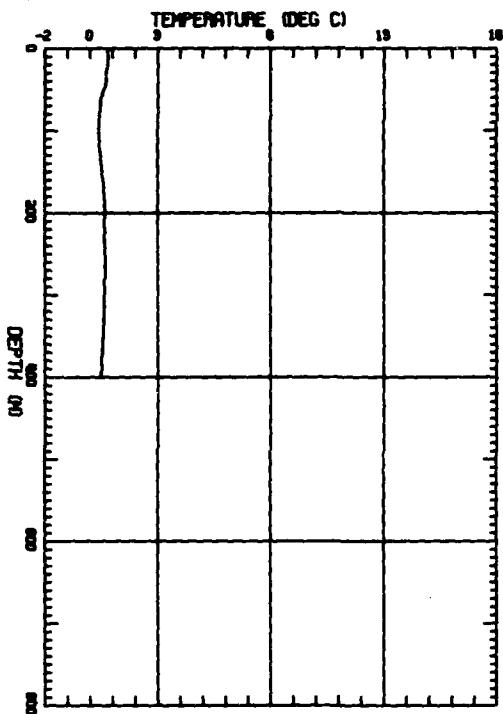
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 261 CHANNEL: 16 LATITUDE: 71 1.9
DATE: 5/20/87 TIME: 15:17:44 LONGITUDE: -9 -35.1



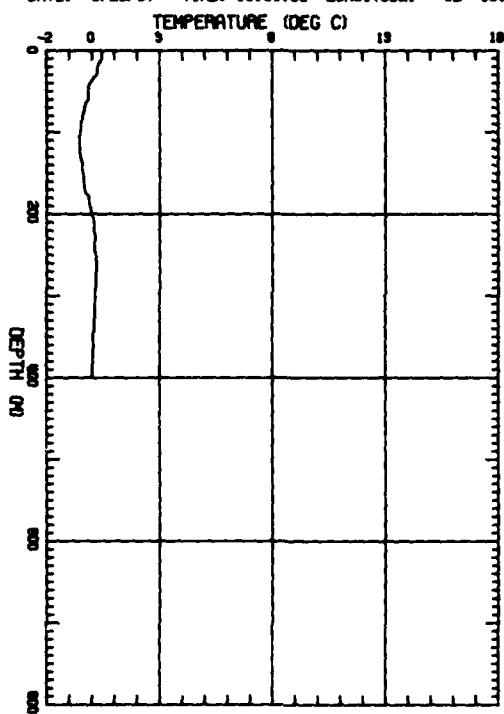
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 266 CHANNEL: 14 LATITUDE: 70 58.1
DATE: 5/20/87 TIME: 15:32:6 LONGITUDE: -13 -6



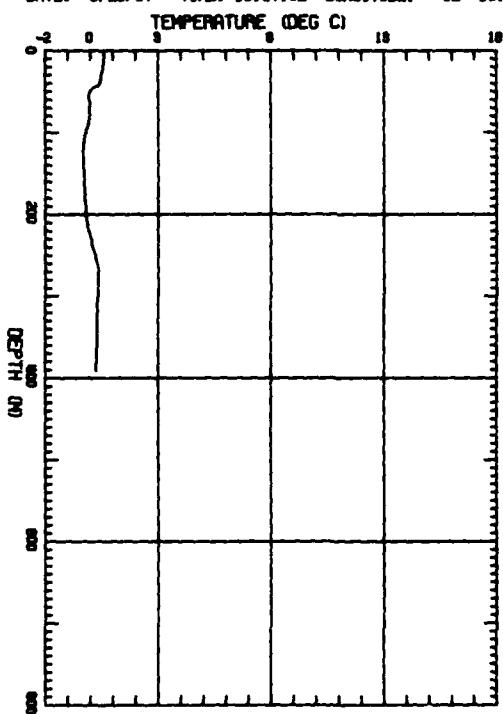
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 267 CHANNEL: 16 LATITUDE: 70 20.3
DATE: 5/20/87 TIME: 15:36:37 LONGITUDE: -13 -4.6



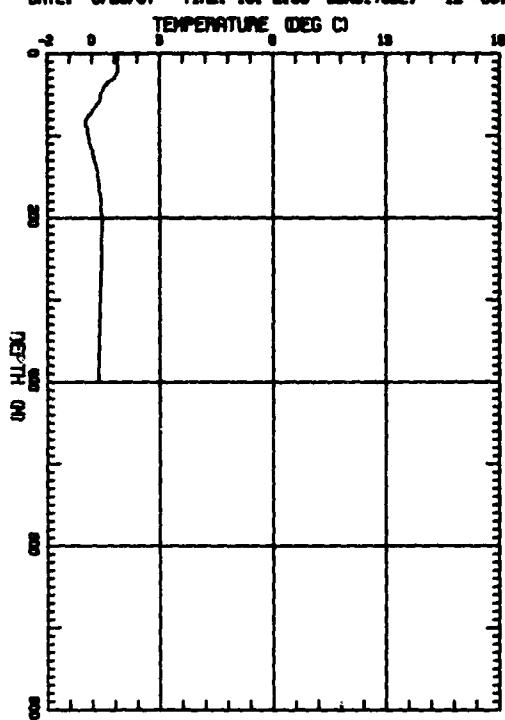
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 268 CHANNEL: 14 LATITUDE: 80 19.9
DATE: 5/20/87 TIME: 15:51:58 LONGITUDE: -12 -58.0



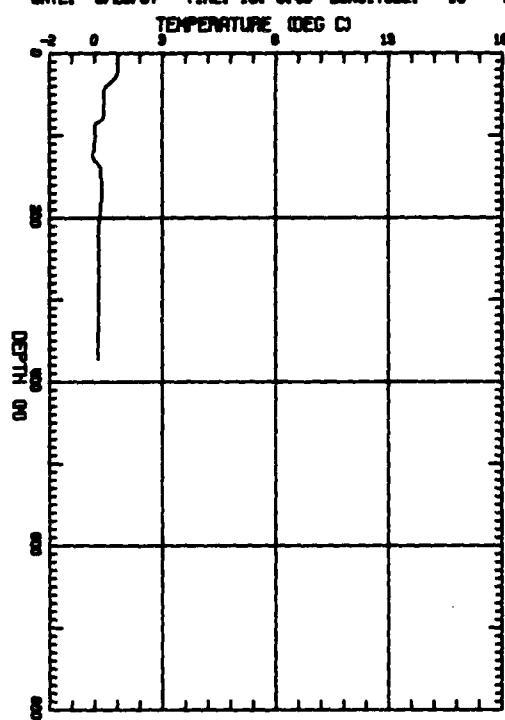
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 270 CHANNEL: 16 LATITUDE: 80 51.0
DATE: 5/20/87 TIME: 15:57:12 LONGITUDE: -12 -58.4



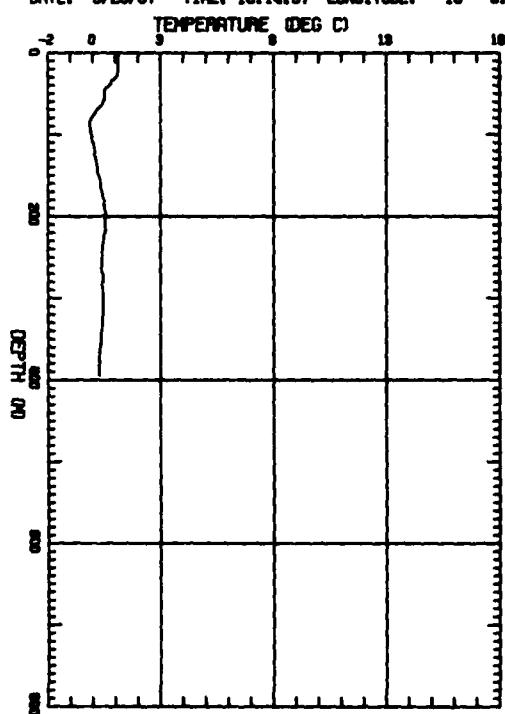
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 271 CHANNEL: 12 LATITUDE: 68 21.7
DATE: 5/20/07 TIME: 16:25:50 LONGITUDE: -12 -58.5



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 272 CHANNEL: 14 LATITUDE: 67 53.0
DATE: 5/20/07 TIME: 16:04:00 LONGITUDE: -19 -8.6



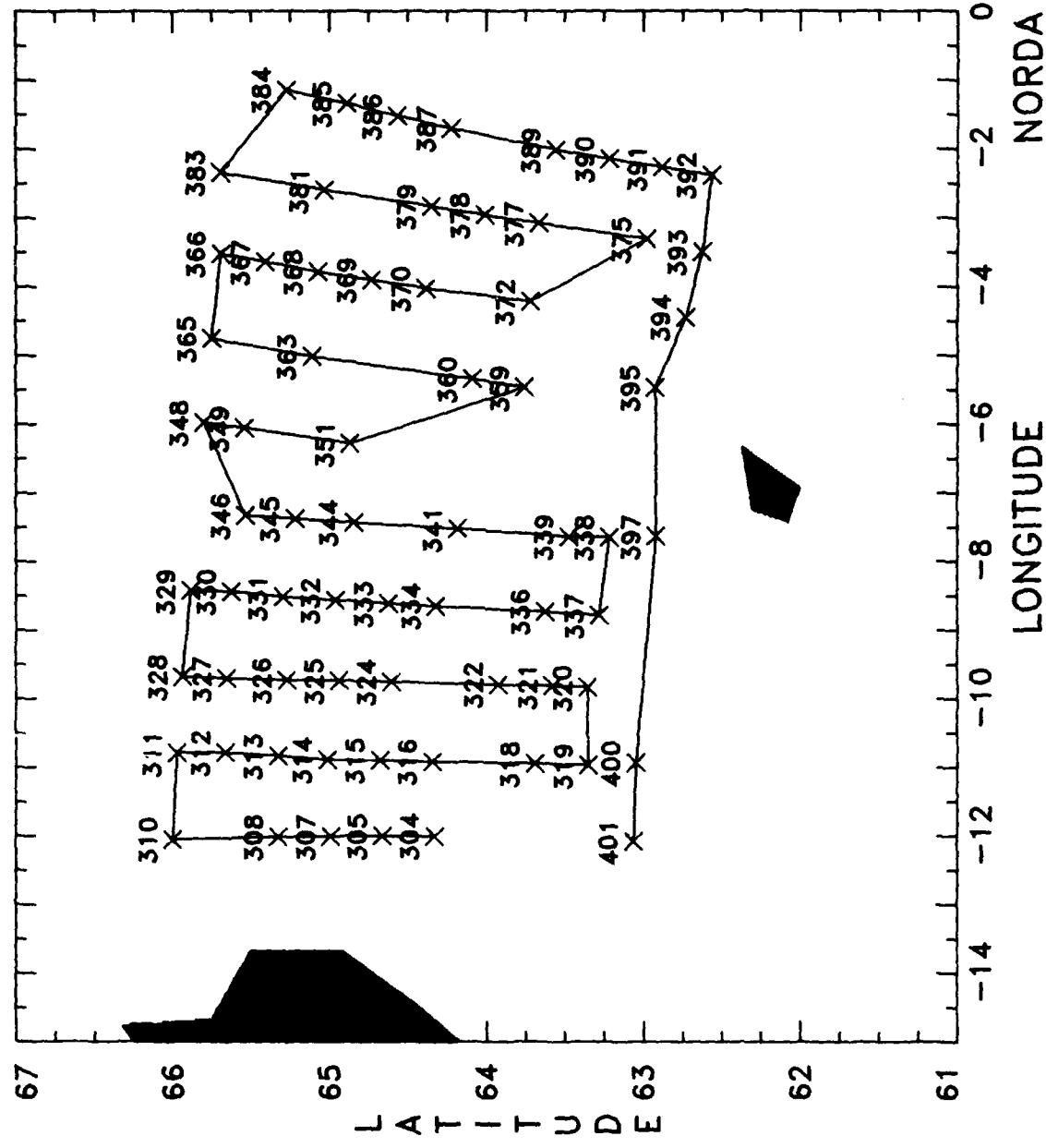
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 273 CHANNEL: 16 LATITUDE: 67 29.9
DATE: 5/20/07 TIME: 16:14:57 LONGITUDE: -19 -9.0



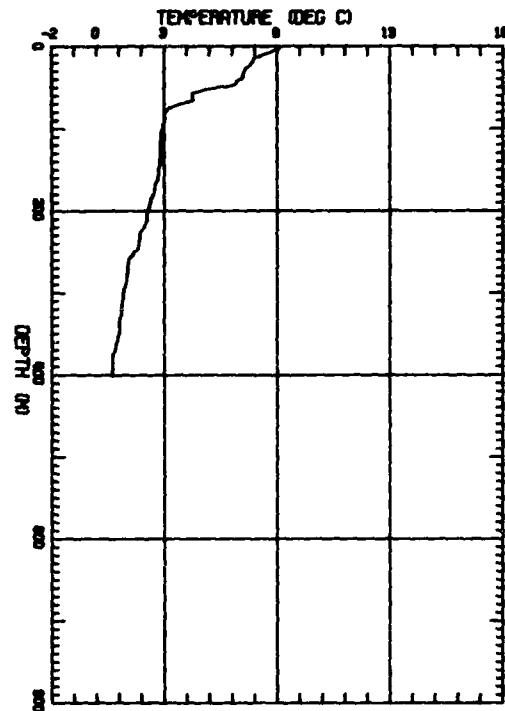
Appendix D.
Drop Positions and Data Profiles, Flight 4,
22 May 1987, Iceland-Faeroe Frontal Region.

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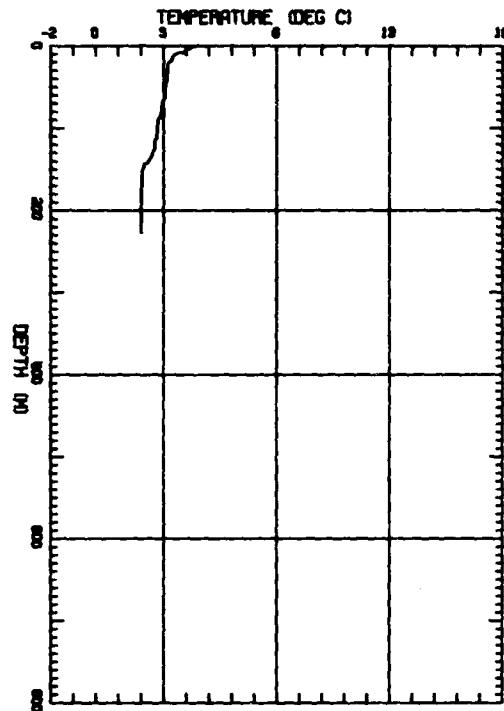
22 May 1987



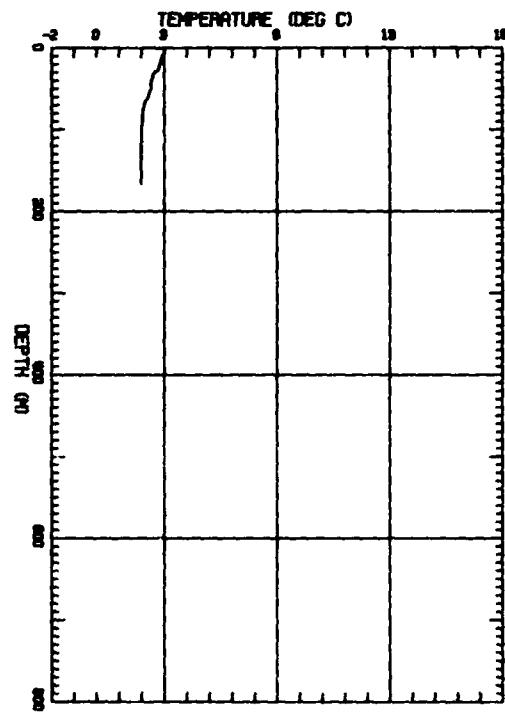
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 304 CHANNEL: 16 LATITUDE: 04 18.0
DATE: 5/22/87 TIME: 10:17:40 LONGITUDE: -12 -.9



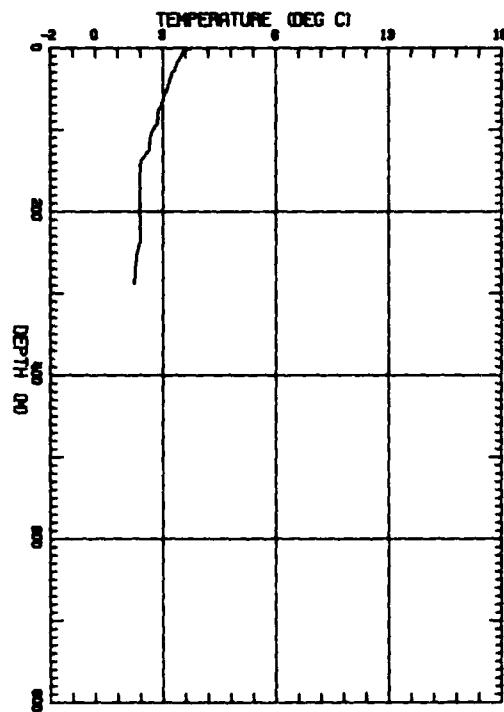
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 305 CHANNEL: 12 LATITUDE: 04 38.6
DATE: 5/22/87 TIME: 10:20:59 LONGITUDE: -12 .0



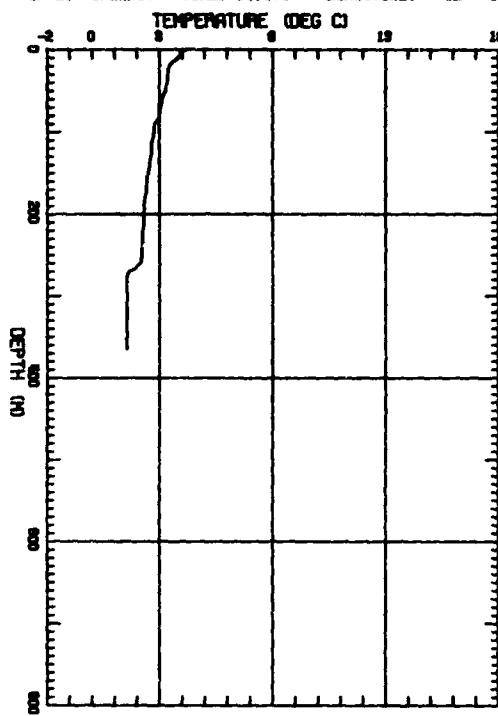
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 307 CHANNEL: 16 LATITUDE: 04 59.5
DATE: 5/22/87 TIME: 10:28:48 LONGITUDE: -12 -.5



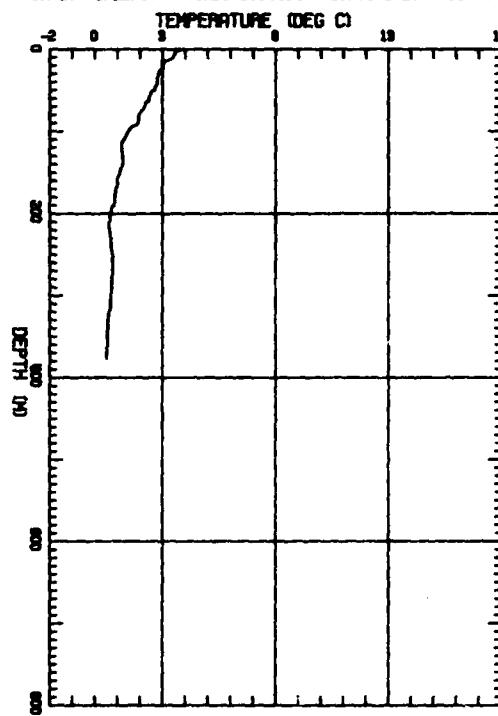
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 308 CHANNEL: 14 LATITUDE: 05 19.5
DATE: 5/22/87 TIME: 10:29:58 LONGITUDE: -12 -.9



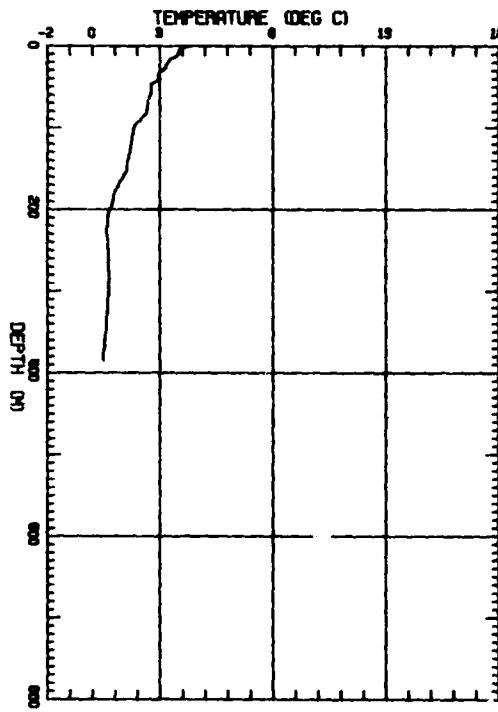
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 310 CHANNEL: 16 LATITUDE: 85 .0
DATE: 5/22/87 TIME: 10:37: 7 LONGITUDE: -12 -3.3



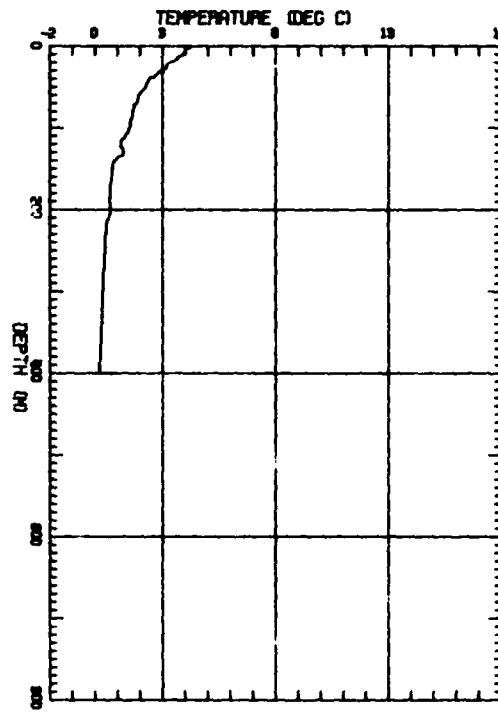
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 311 CHANNEL: 16 LATITUDE: 85 58.6
DATE: 5/22/87 TIME: 10:46:47 LONGITUDE: -10 -47.3



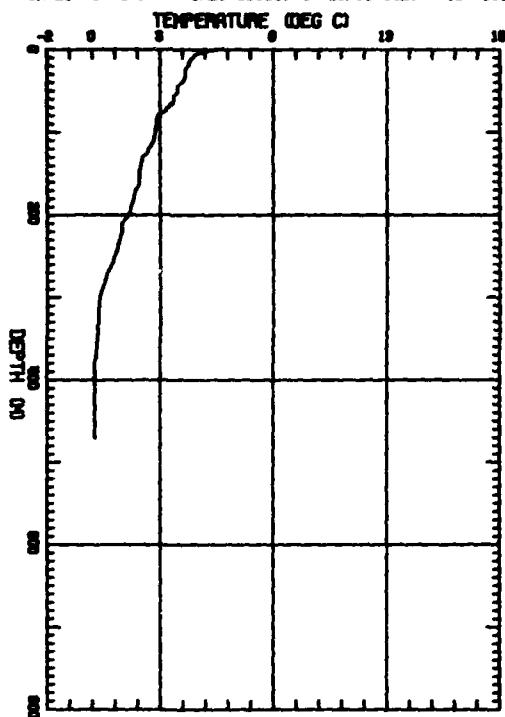
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 312 CHANNEL: 16 LATITUDE: 85 39.8
DATE: 5/22/87 TIME: 10:48:27 LONGITUDE: -10 -47.1



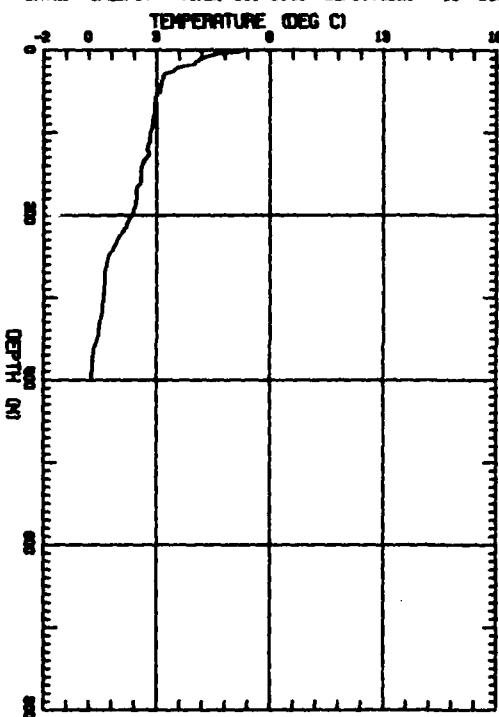
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 313 CHANNEL: 12 LATITUDE: 85 19.6
DATE: 5/22/87 TIME: 10:52:38 LONGITUDE: -10 -50.2



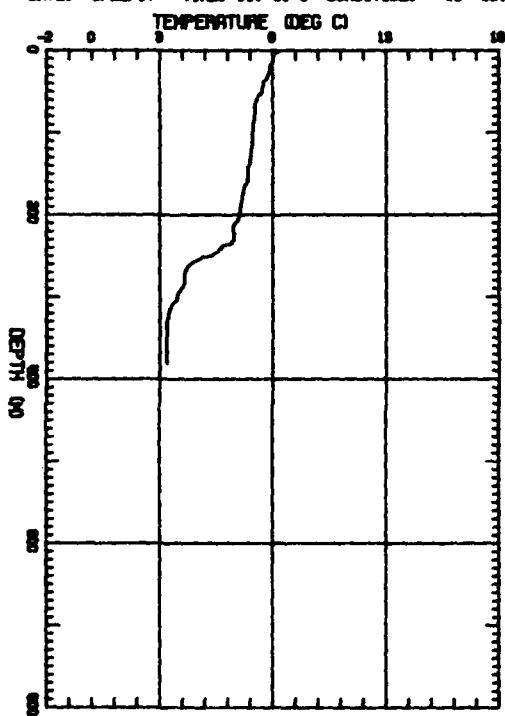
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 318 CHANNEL: 16 LATITUDE: 65 .8
DATE: 5/22/87 TIME: 10:58:4 LONGITUDE: -10 -53.4



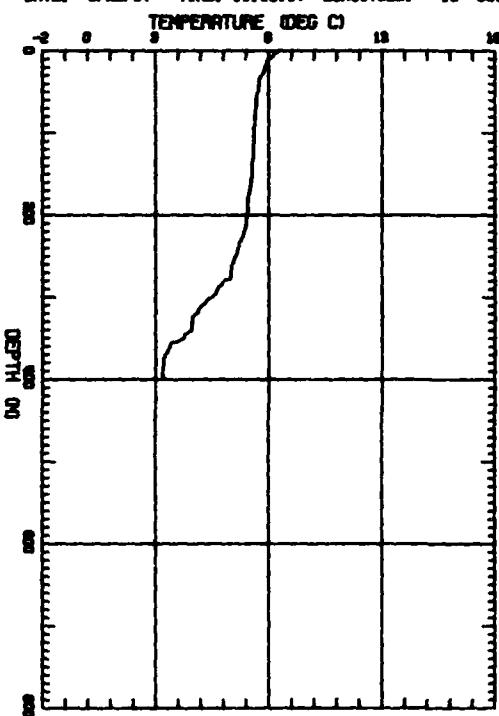
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 318 CHANNEL: 16 LATITUDE: 65 40.7
DATE: 5/22/87 TIME: 11:04:0 LONGITUDE: -10 -53.7



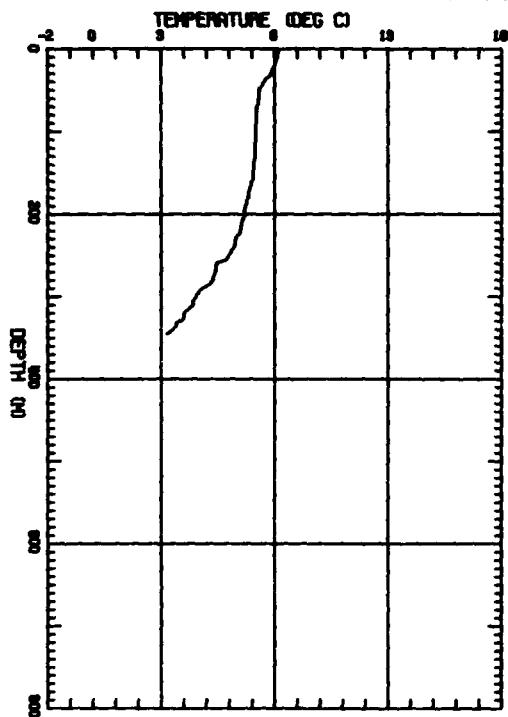
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 318 CHANNEL: 12 LATITUDE: 65 20.7
DATE: 5/22/87 TIME: 11: 5: 0 LONGITUDE: -10 -55.0



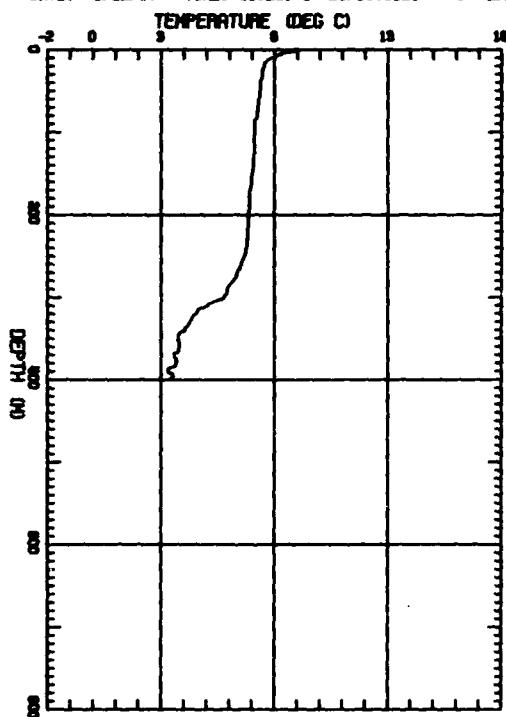
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 318 CHANNEL: 16 LATITUDE: 65 51.6
DATE: 5/22/87 TIME: 11:13:17 LONGITUDE: -10 -56.0



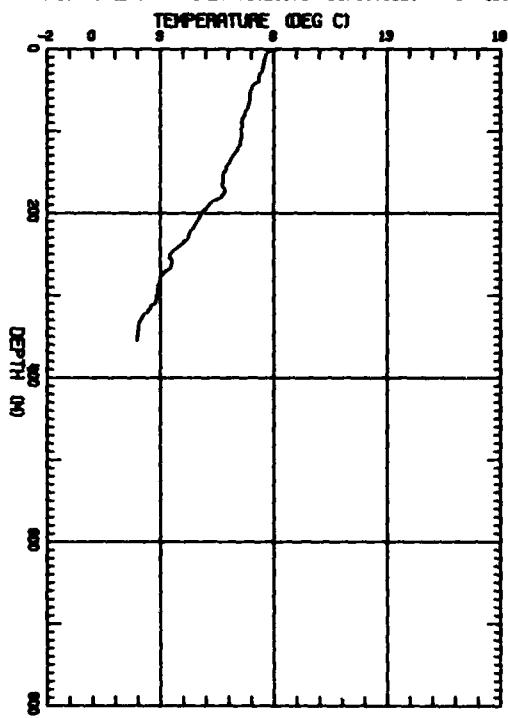
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 318 CHANNEL: 12 LATITUDE: 63 21.0
DATE: 5/22/87 TIME: 11:17:30 LONGITUDE: -9 46.1



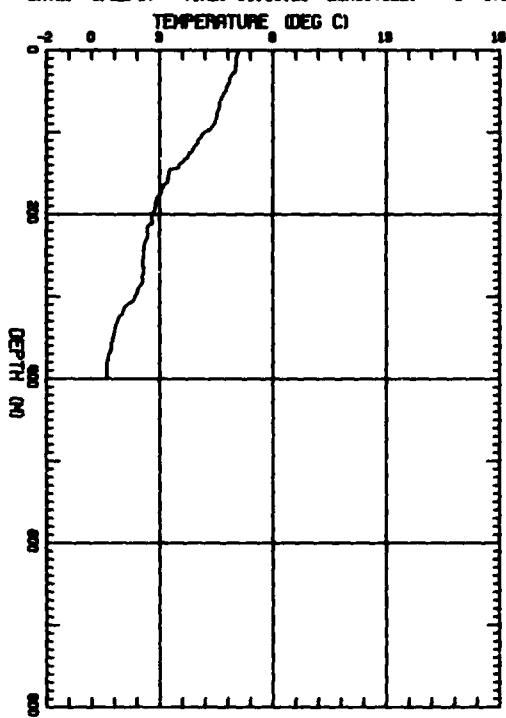
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 320 CHANNEL: 16 LATITUDE: 63 21.2
DATE: 5/22/87 TIME: 11:28:09 LONGITUDE: -9 46.9



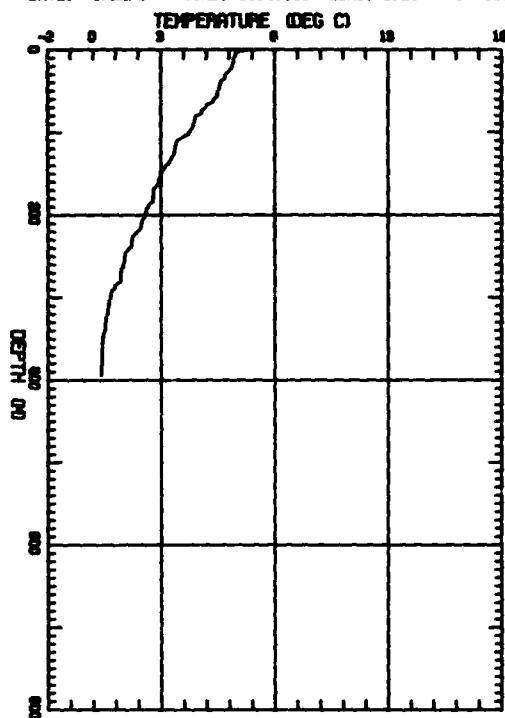
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 321 CHANNEL: 14 LATITUDE: 63 34.8
DATE: 5/22/87 TIME: 11:29:11 LONGITUDE: -9 48.6



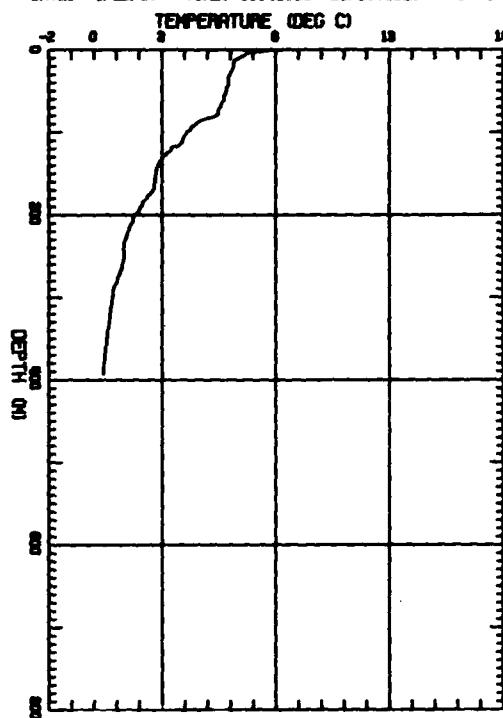
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 322 CHANNEL: 12 LATITUDE: 63 55.4
DATE: 5/22/87 TIME: 11:39:28 LONGITUDE: -9 47.7



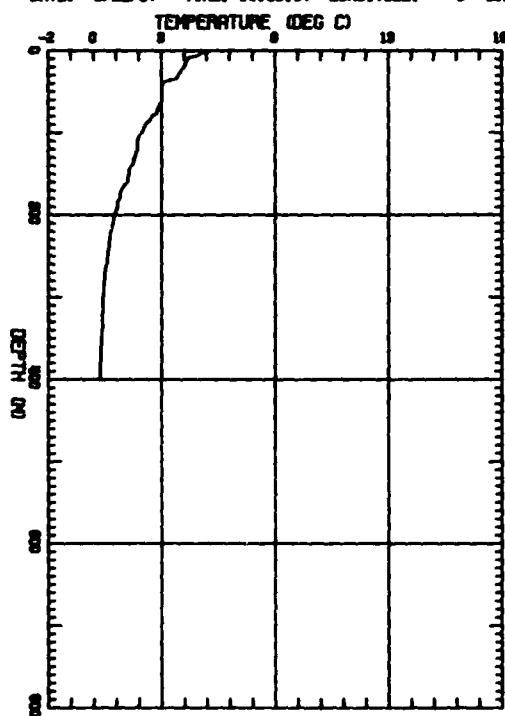
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 326 CHANNEL: 16 LATITUDE: 05 38.3
DATE: 5/22/87 TIME: 11:41:59 LONGITUDE: -0 45.2



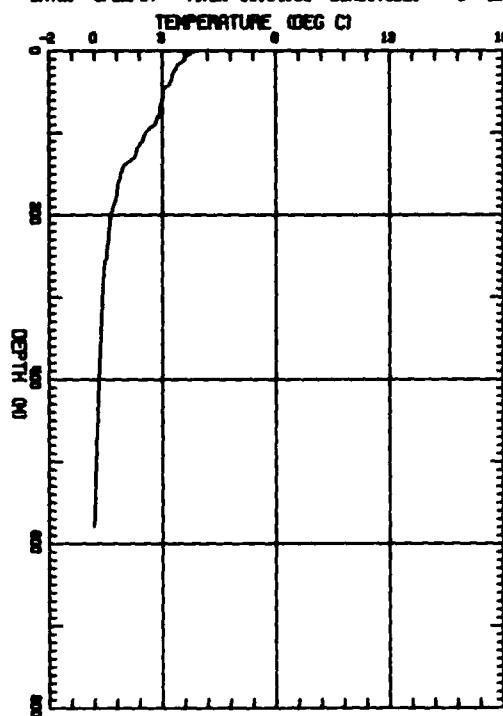
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 326 CHANNEL: 16 LATITUDE: 05 38.2
DATE: 5/22/87 TIME: 11:46:15 LONGITUDE: -0 45.9



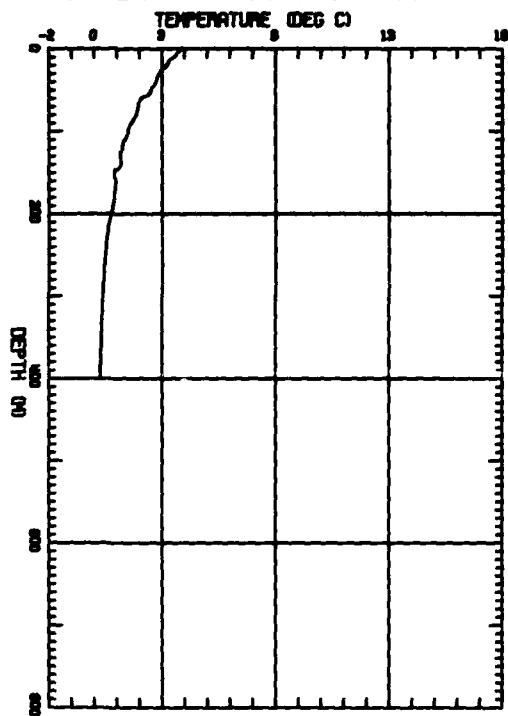
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 326 CHANNEL: 16 LATITUDE: 05 18.2
DATE: 5/22/87 TIME: 11:50:17 LONGITUDE: -0 45.7



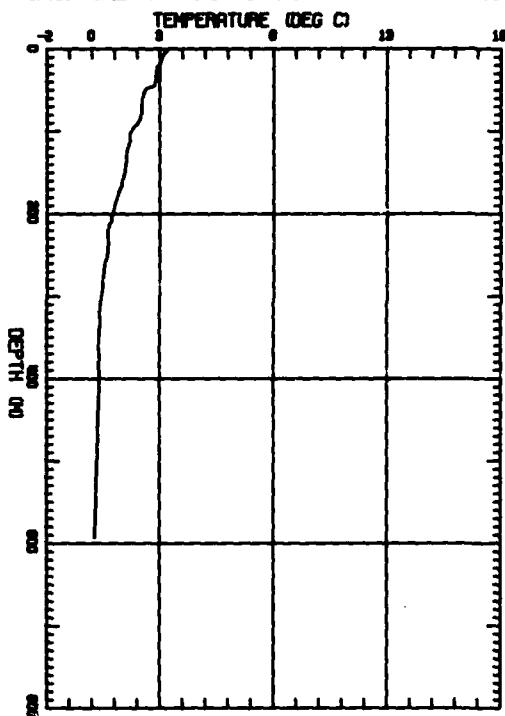
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 327 CHANNEL: 16 LATITUDE: 05 38.2
DATE: 5/22/87 TIME: 11:54:58 LONGITUDE: -0 42.9



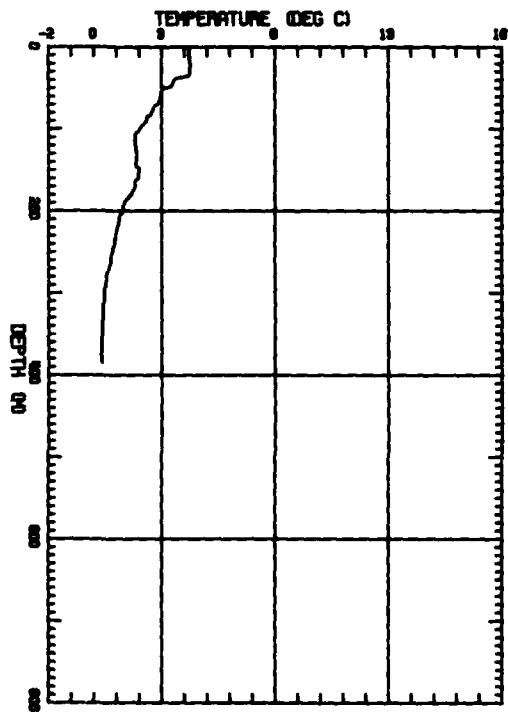
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 320 CHANNEL: 16 LATITUDE: 85 58.2
DATE: 5/22/87 TIME: 11:58:31 LONGITUDE: -8 -40.6



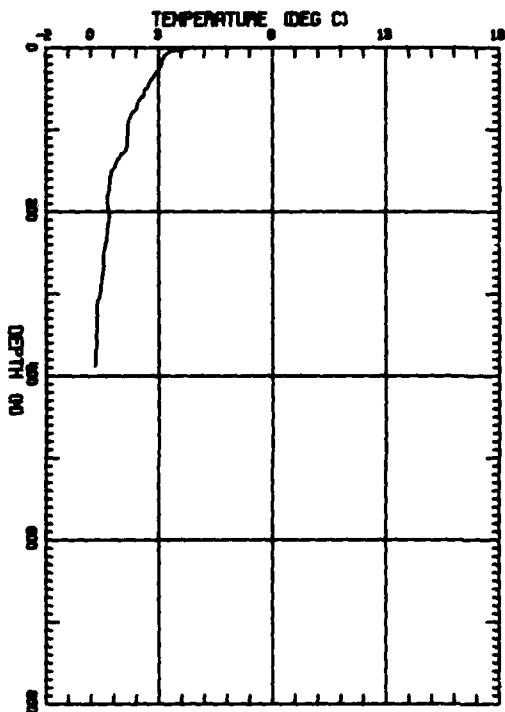
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 320 CHANNEL: 16 LATITUDE: 85 53.0
DATE: 5/22/87 TIME: 12: 5:13 LONGITUDE: -8 -25.4



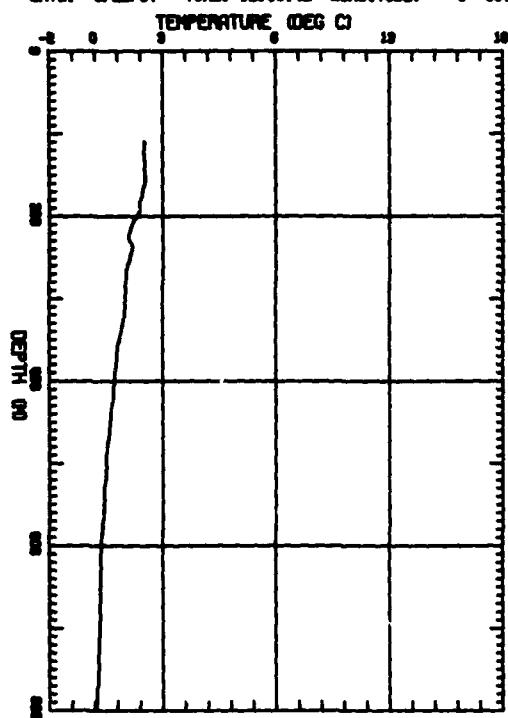
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 320 CHANNEL: 16 LATITUDE: 85 57.4
DATE: 5/22/87 TIME: 12: 8:30 LONGITUDE: -8 -28.3



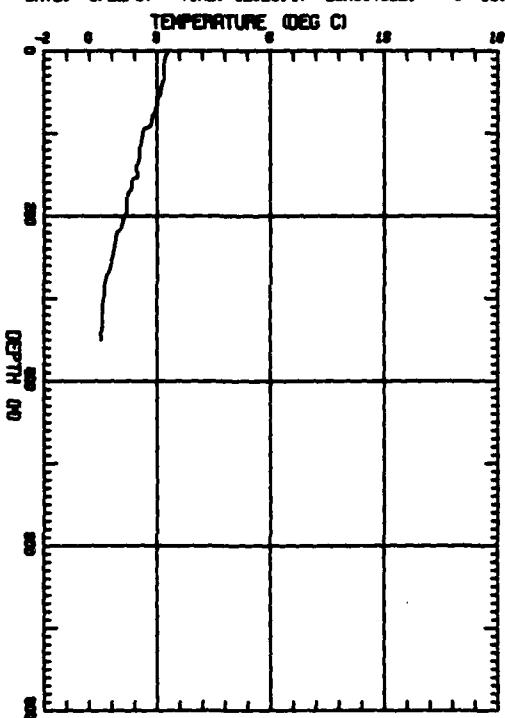
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 321 CHANNEL: 16 LATITUDE: 85 17.8
DATE: 5/22/87 TIME: 12:12:35 LONGITUDE: -8 -31.0



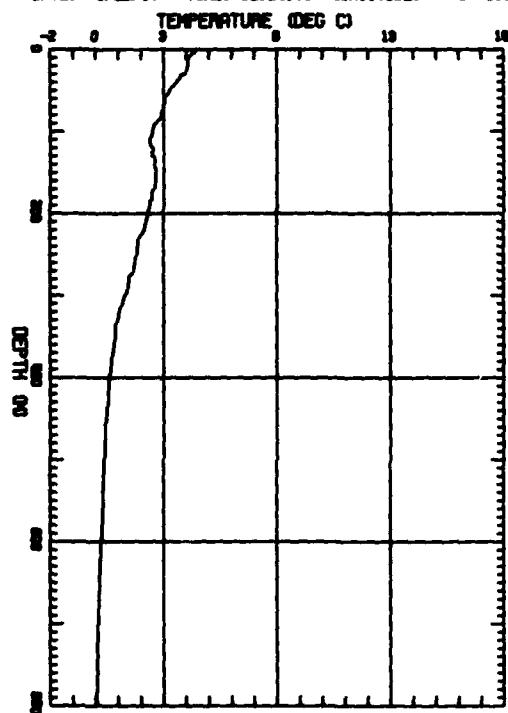
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 382 CHANNEL: 16 LATITUDE: 06 57.6
DATE: 5/22/07 TIME: 12:16:42 LONGITUDE: -6 39.0



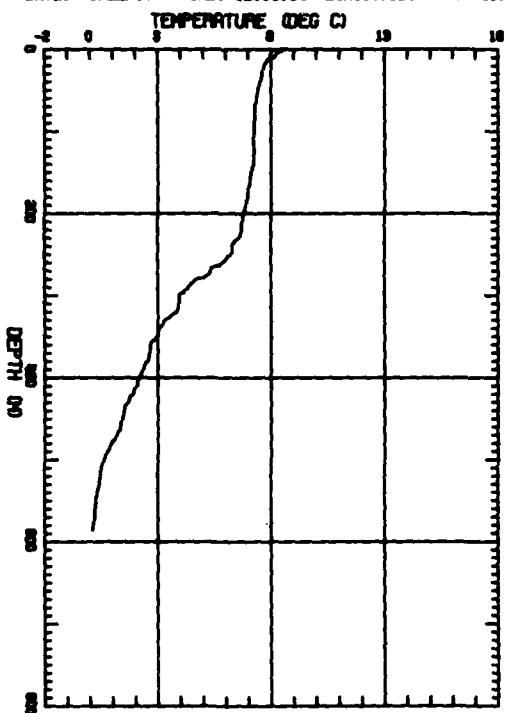
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 382 CHANNEL: 12 LATITUDE: 06 57.9
DATE: 5/22/07 TIME: 12:20:47 LONGITUDE: -6 39.0



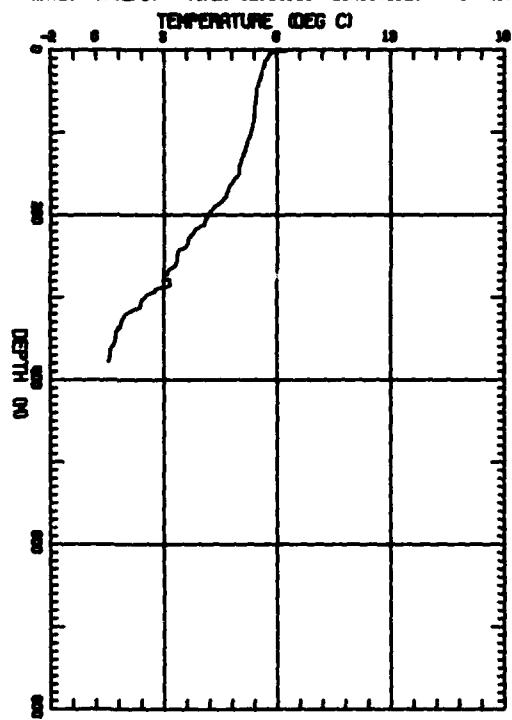
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 386 CHANNEL: 16 LATITUDE: 06 19.2
DATE: 5/22/07 TIME: 12:26:36 LONGITUDE: -6 39.0



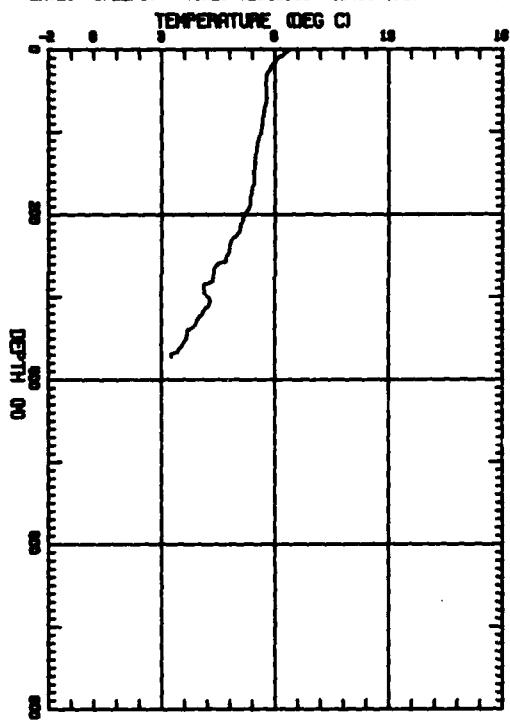
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 386 CHANNEL: 16 LATITUDE: 06 37.9
DATE: 5/22/07 TIME: 12:33:34 LONGITUDE: -6 49.0



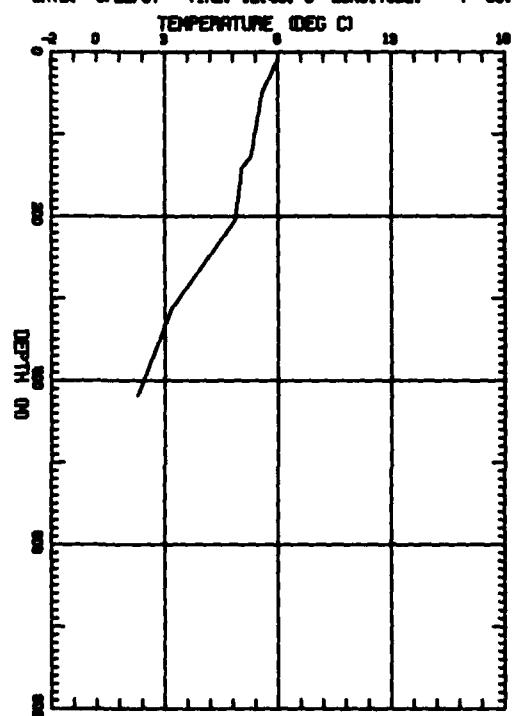
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 367 CHANNEL: 16 LATITUDE: 69 16.7
DATE: 5/22/87 TIME: 12:38:58 LONGITUDE: -6 46.9



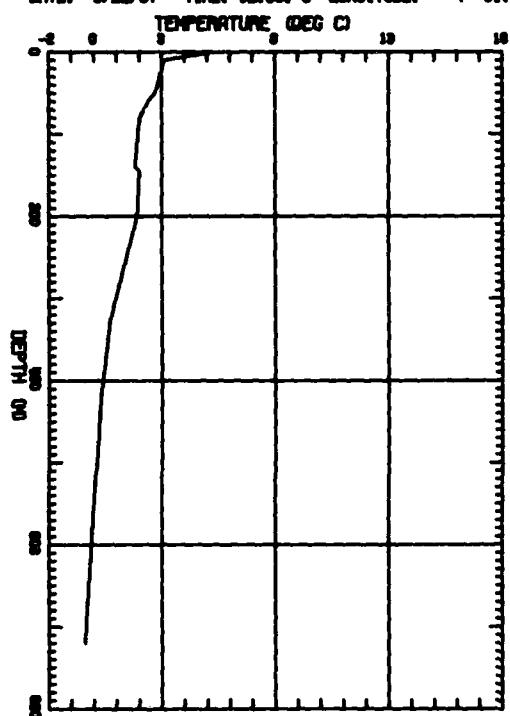
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 368 CHANNEL: 16 LATITUDE: 69 12.6
DATE: 5/22/87 TIME: 12:45:58 LONGITUDE: -7 38.6



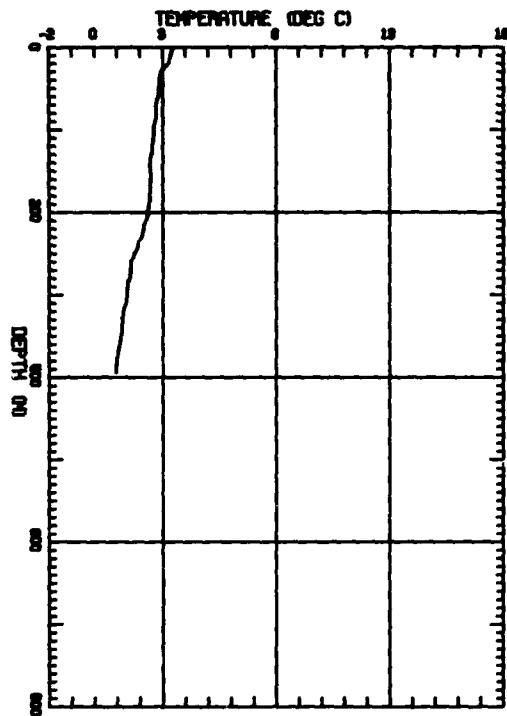
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 368 CHANNEL: 12 LATITUDE: 69 28.3
DATE: 5/22/87 TIME: 12:45:58.0 LONGITUDE: -7 38.2



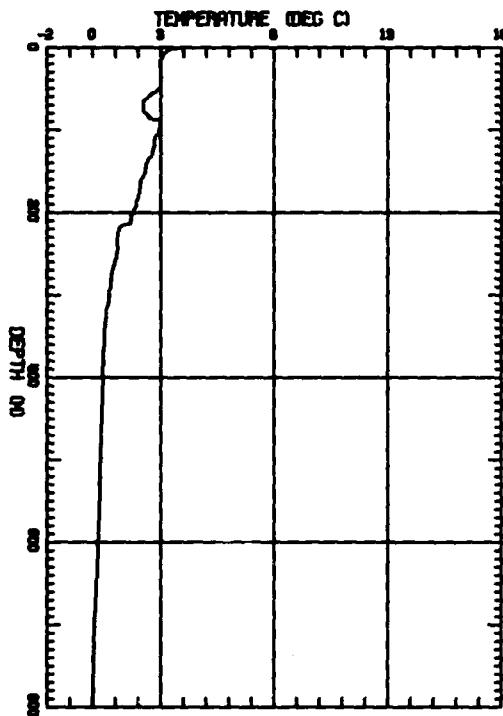
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 361 CHANNEL: 16 LATITUDE: 69 11.0
DATE: 5/22/87 TIME: 12:55:0 LONGITUDE: -7 31.1



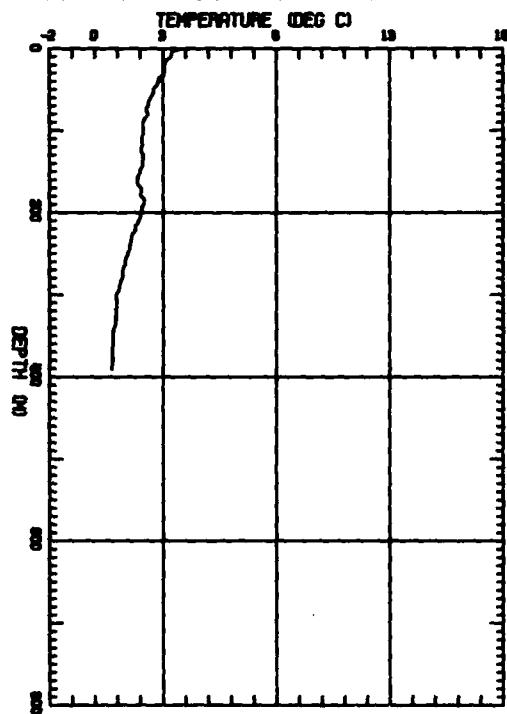
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 348 CHANNEL: 16 LATITUDE: 05 50.6
DATE: 5/22/87 TIME: 13:10:8 LONGITUDE: -7 25.6



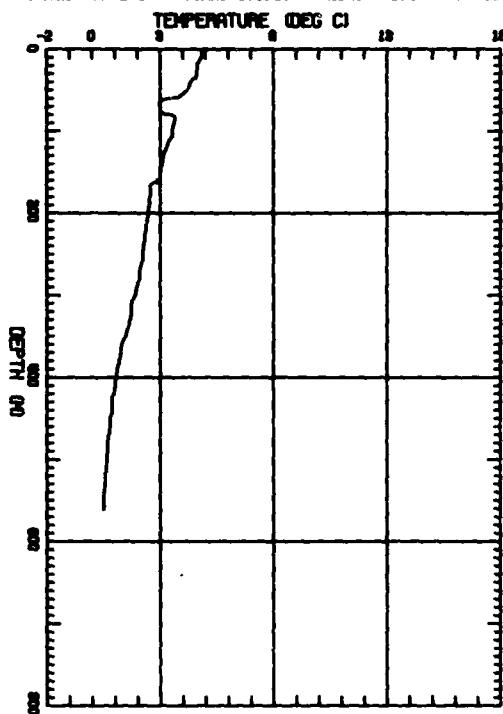
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 348 CHANNEL: 16 LATITUDE: 05 19.0
DATE: 5/22/87 TIME: 13:12:22 LONGITUDE: -7 22.5



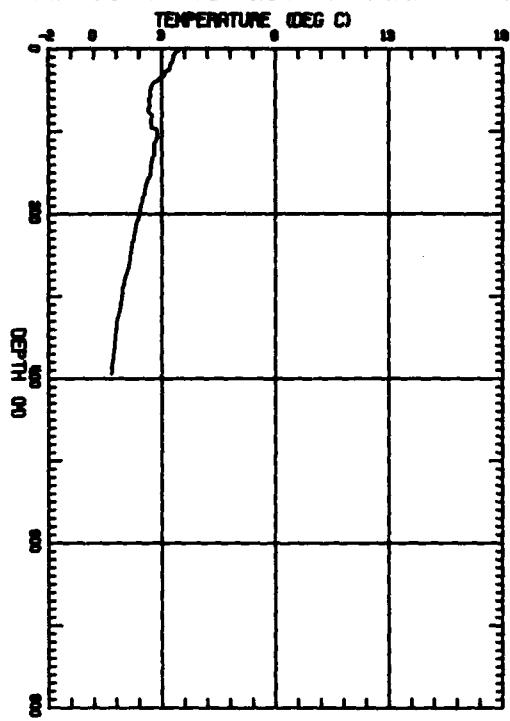
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 348 CHANNEL: 16 LATITUDE: 05 32.0
DATE: 5/22/87 TIME: 13:15:11 LONGITUDE: -7 19.7



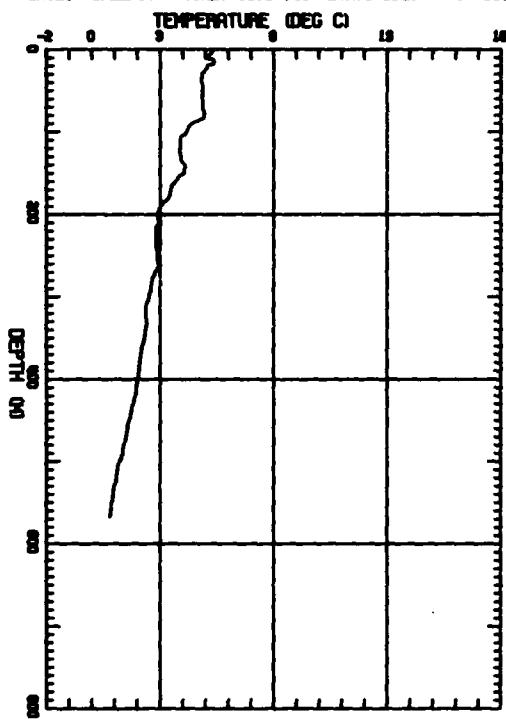
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 348 CHANNEL: 16 LATITUDE: 05 48.1
DATE: 5/22/87 TIME: 13:28:7 LONGITUDE: -5 58.6



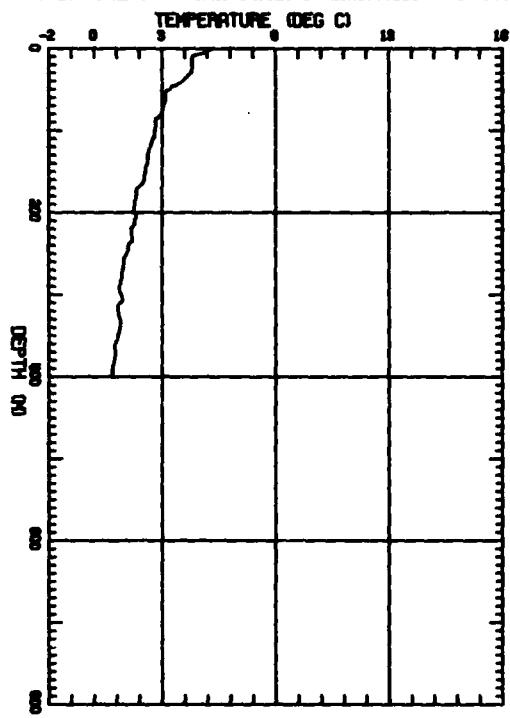
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 380 CHANNEL: 18 LATITUDE: 05 52.5
DATE: 5/22/87 TIME: 13:29:17 LONGITUDE: -6 39.9



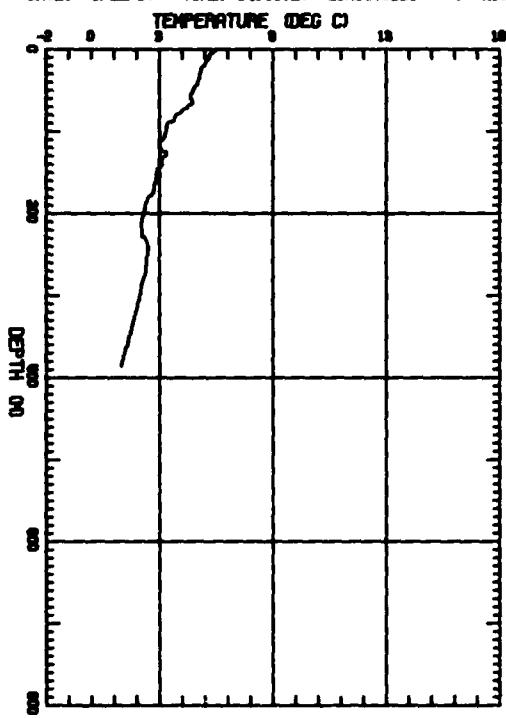
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 381 CHANNEL: 18 LATITUDE: 06 52.2
DATE: 5/22/87 TIME: 13:37:10 LONGITUDE: -6 18.1



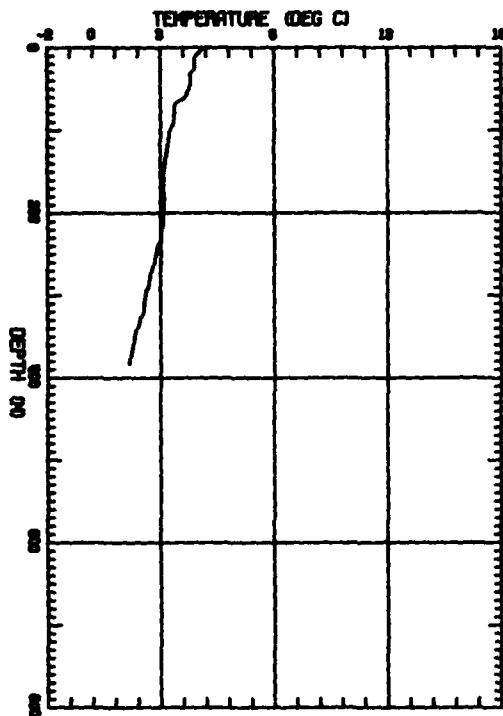
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 380 CHANNEL: 12 LATITUDE: 05 55.2
DATE: 5/22/87 TIME: 14:12:0 LONGITUDE: -5 27.9



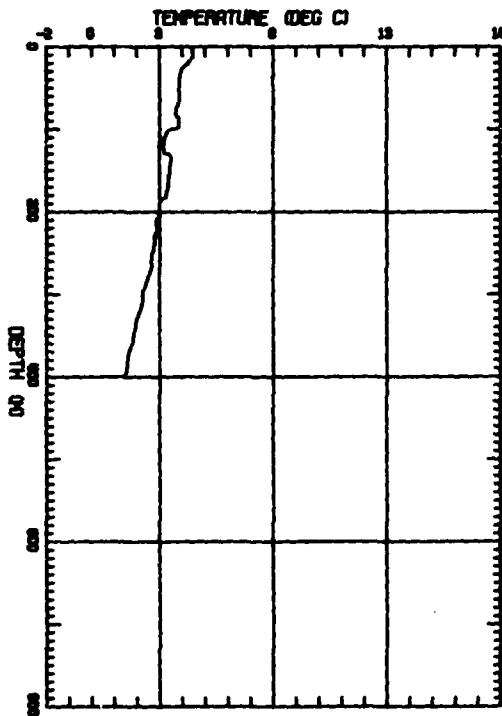
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 380 CHANNEL: 16 LATITUDE: 06 5.2
DATE: 5/22/87 TIME: 14:16:27 LONGITUDE: -5 20.5



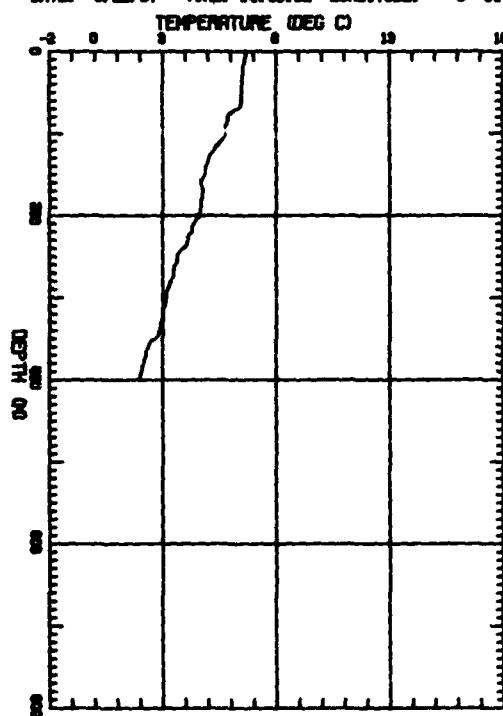
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 303 CHANNEL: 18 LATITUDE: 65 6.6
DATE: 5/22/87 TIME: 14:29:2 LONGITUDE: -5 -0



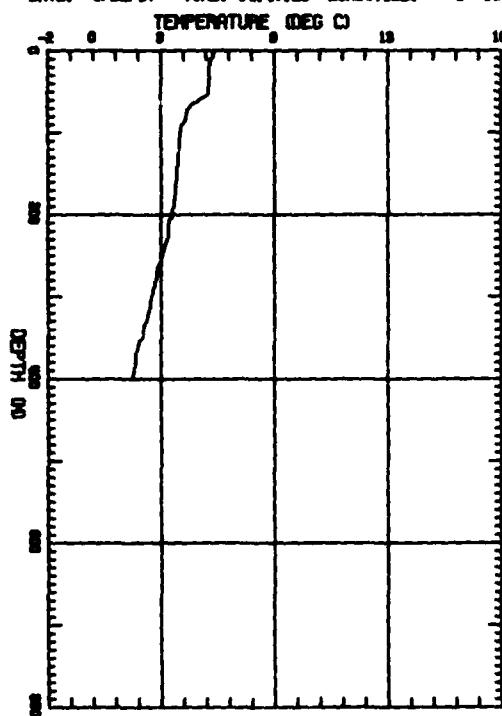
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 305 CHANNEL: 12 LATITUDE: 65 66.8
DATE: 5/22/87 TIME: 14:37:14 LONGITUDE: -4 -16.5



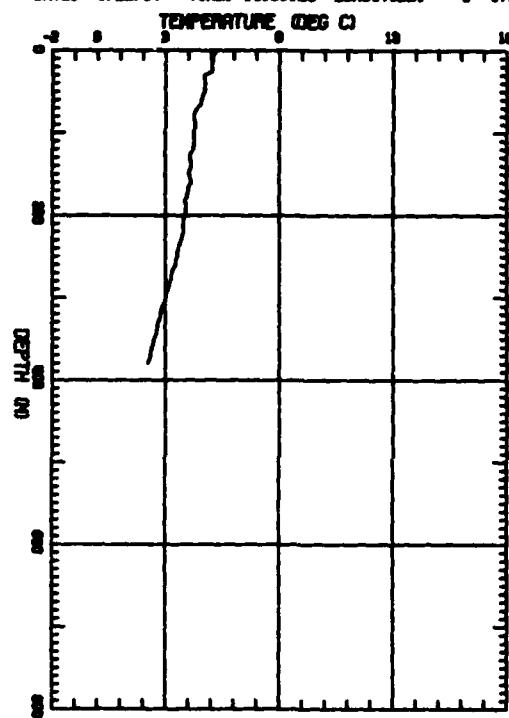
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 306 CHANNEL: 18 LATITUDE: 65 51.4
DATE: 5/22/87 TIME: 14:49:52 LONGITUDE: -3 -31.2



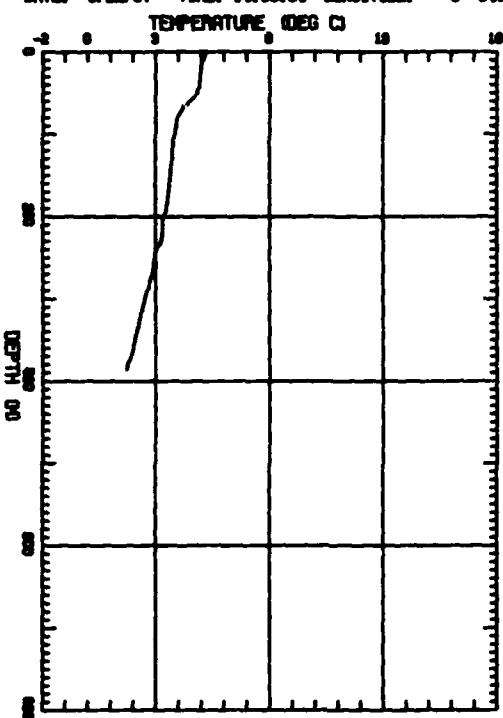
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 307 CHANNEL: 14 LATITUDE: 65 24.3
DATE: 5/22/87 TIME: 14:47:26 LONGITUDE: -3 -36.3



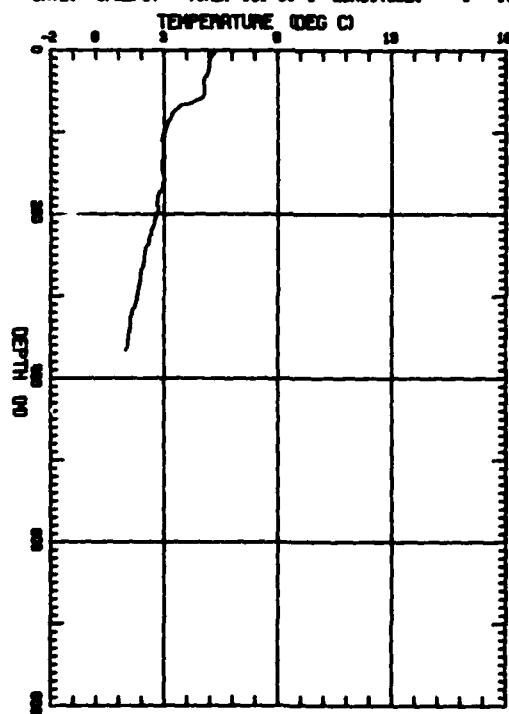
PROJECT: TACTICAL OCEANOGRAPHY
DRIP NO: 368 CHANNEL: 12 LATITUDE: 65 41.2
DATE: 5/22/87 TIME: 16:51:28 LONGITUDE: -8 -47.1



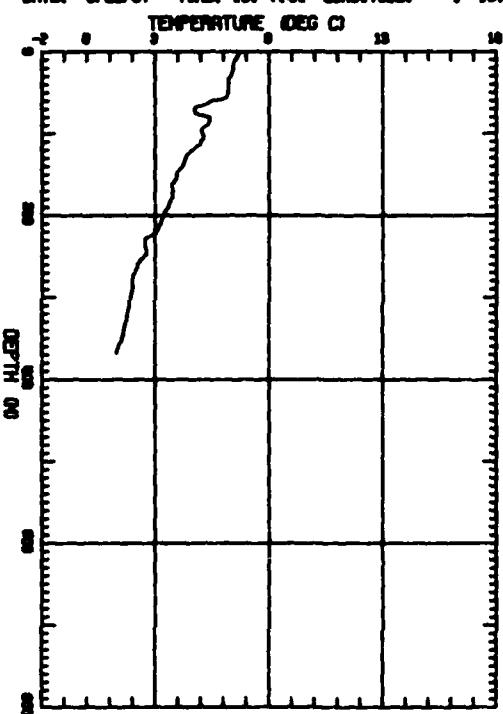
PROJECT: TACTICAL OCEANOGRAPHY
DRIP NO: 368 CHANNEL: 16 LATITUDE: 65 43.6
DATE: 5/22/87 TIME: 16:55:34 LONGITUDE: -8 -48.0



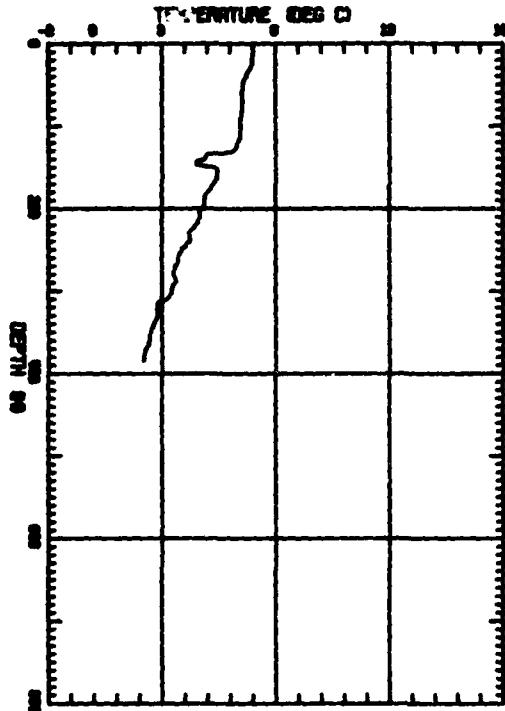
PROJECT: TACTICAL OCEANOGRAPHY
DRIP NO: 370 CHANNEL: 16 LATITUDE: 65 28.1
DATE: 5/22/87 TIME: 15: 0: 6 LONGITUDE: -8 -13.7



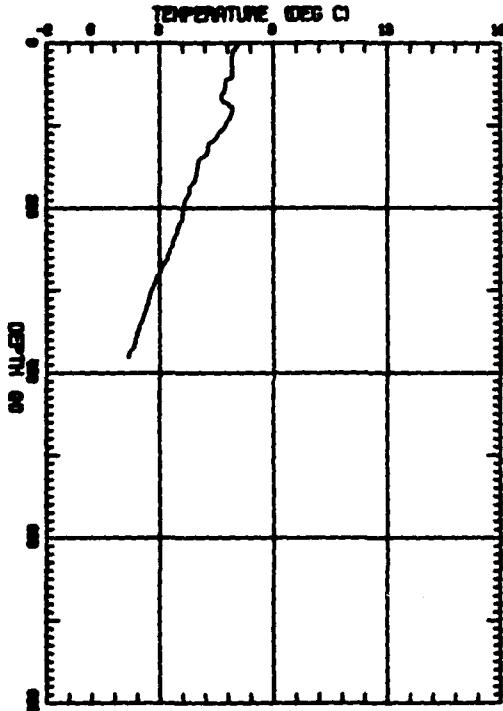
PROJECT: TACTICAL OCEANOGRAPHY
DRIP NO: 372 CHANNEL: 16 LATITUDE: 65 43.1
DATE: 5/22/87 TIME: 15: 7:04 LONGITUDE: -8 -13.0



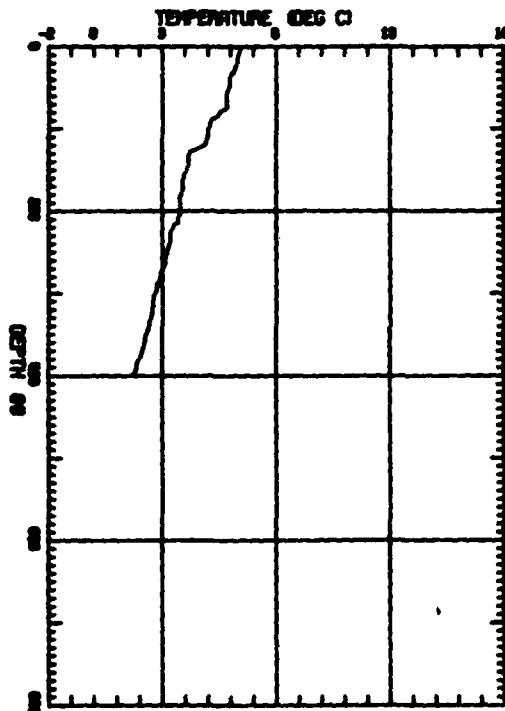
PROJECT: TACTICAL ECNOGRAPHY
DRIP NO: 376 CHANNEL: 18 LATITUDE: 08 29.7
DATE: 5/28/87 TIME: 15:29:07 LONGITUDE: -2 46.6



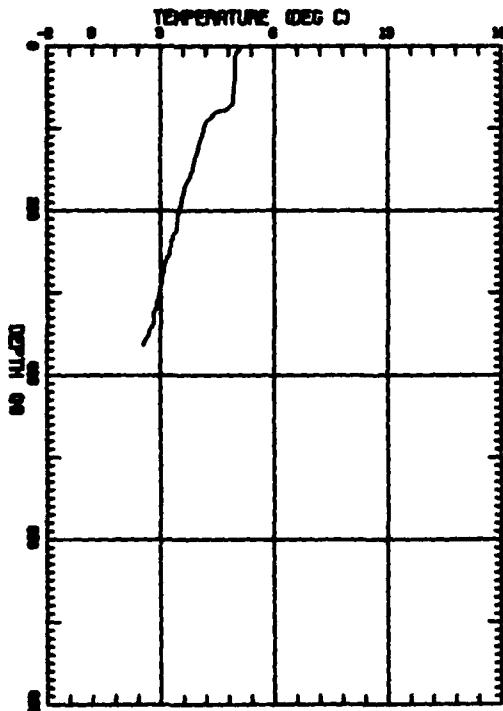
PROJECT: TACTICAL ECNOGRAPHY
DRIP NO: 377 CHANNEL: 12 LATITUDE: 08 28.8
DATE: 5/28/87 TIME: 15:31:00 LONGITUDE: -2 46.7



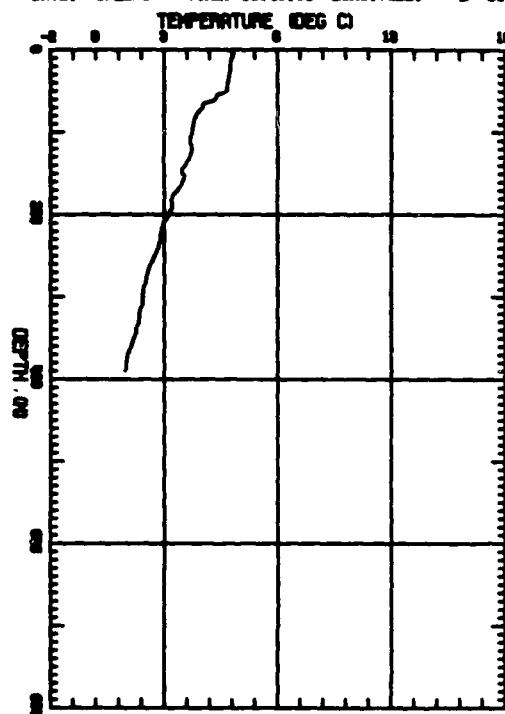
PROJECT: TACTICAL ECNOGRAPHY
DRIP NO: 378 CHANNEL: 18 LATITUDE: 08 29.4
DATE: 5/28/87 TIME: 15:35:47 LONGITUDE: -2 47.0



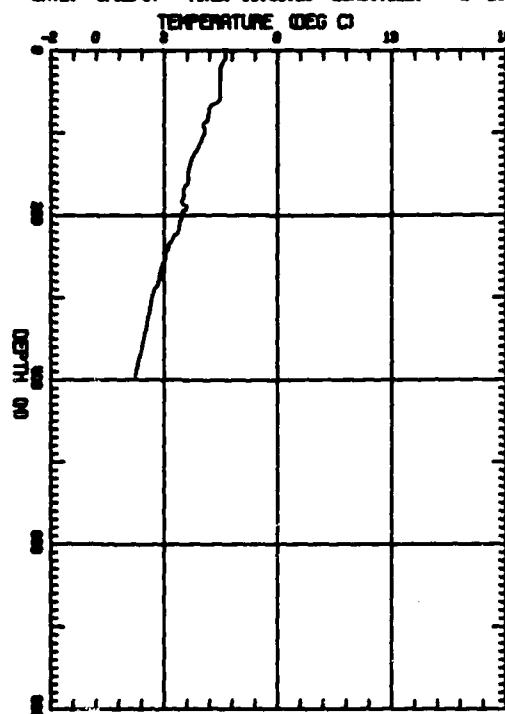
PROJECT: TACTICAL ECNOGRAPHY
DRIP NO: 379 CHANNEL: 18 LATITUDE: 08 29.9
DATE: 5/28/87 TIME: 15:36:00 LONGITUDE: -2 46.8



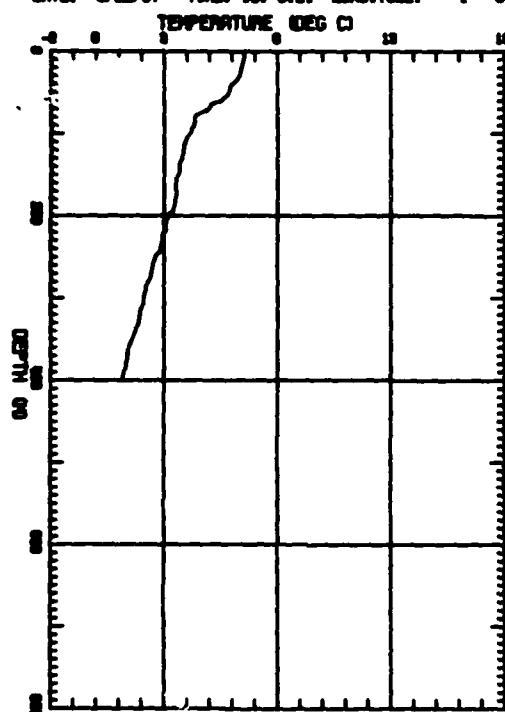
PROJECT: TACTICAL SEISMOGRAPHY
DRIP NO: 301 CHANNEL: 18 LATITUDE: 65 1.8
DATE: 5/22/07 TIME: 15:49:18 LONGITUDE: -2 -35.4



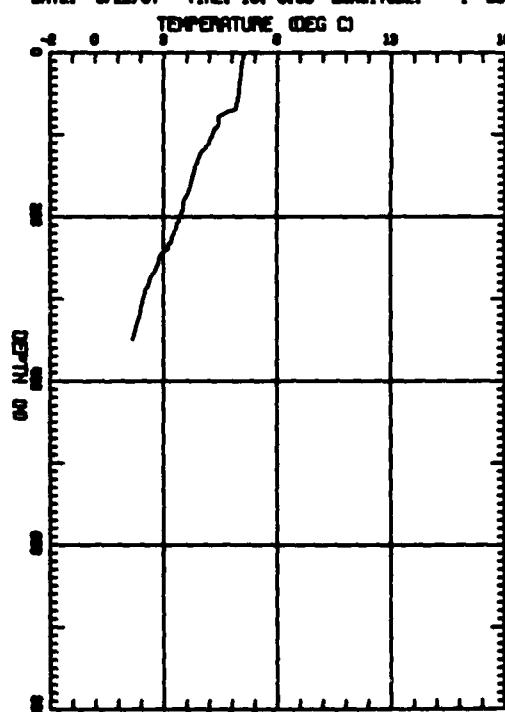
PROJECT: TACTICAL SEISMOGRAPHY
DRIP NO: 300 CHANNEL: 12 LATITUDE: 65 61.8
DATE: 5/22/07 TIME: 15:59:21 LONGITUDE: -2 -30.3



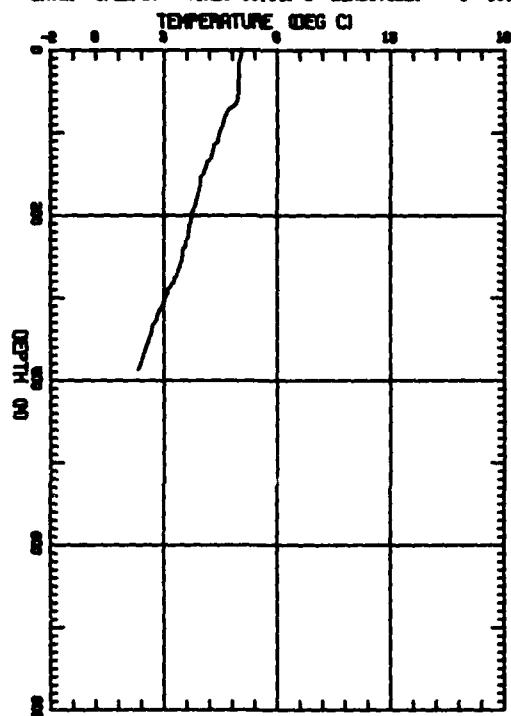
PROJECT: TACTICAL SEISMOGRAPHY
DRIP NO: 300 CHANNEL: 18 LATITUDE: 65 18.3
DATE: 5/22/07 TIME: 16: 54:21 LONGITUDE: -1 -0.8



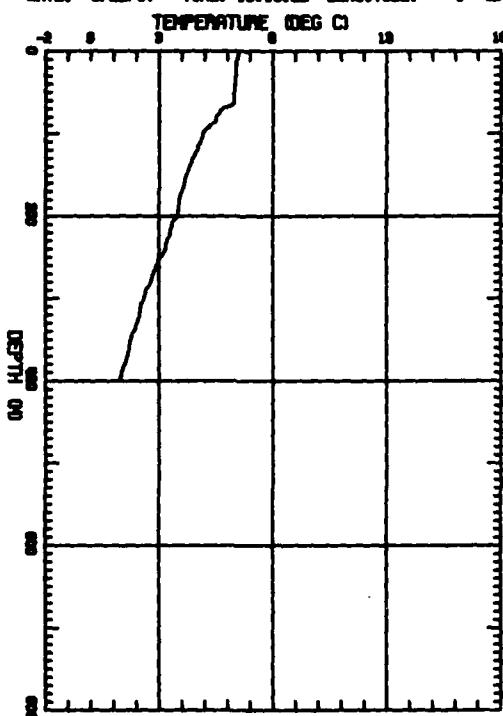
PROJECT: TACTICAL SEISMOGRAPHY
DRIP NO: 300 CHANNEL: 14 LATITUDE: 65 59.2
DATE: 5/22/07 TIME: 16: 04:00 LONGITUDE: -1 -20.3



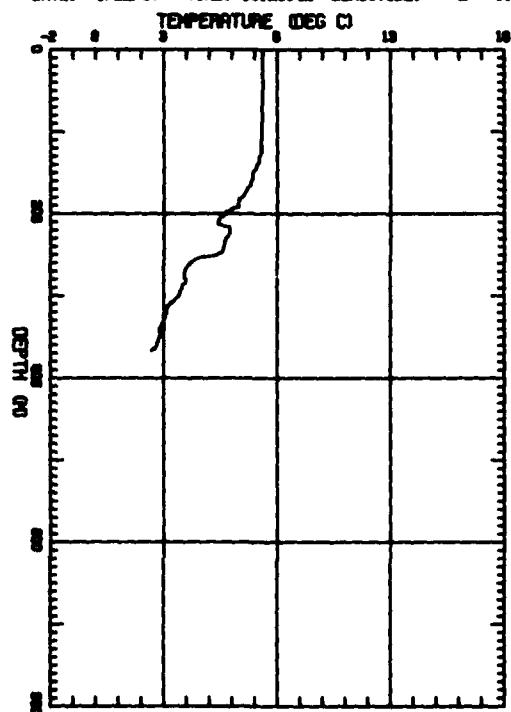
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 366 CHANNEL: 12 LATITUDE: 06 36.0
DATE: 5/22/87 TIME: 16:16:0 LONGITUDE: -1 31.9



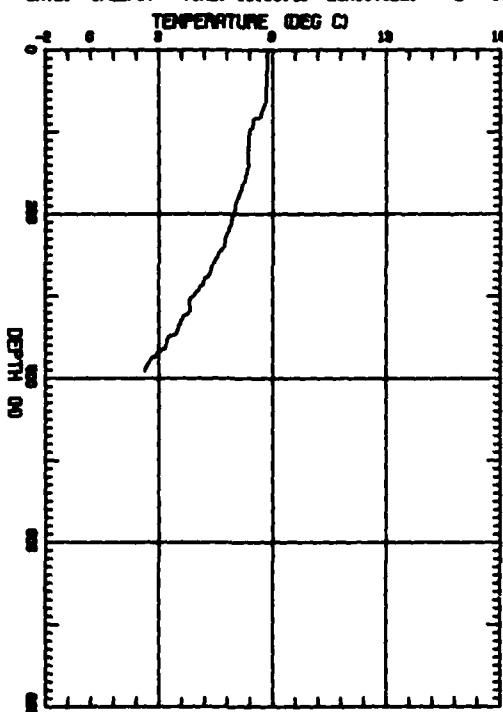
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 367 CHANNEL: 16 LATITUDE: 06 19.4
DATE: 5/22/87 TIME: 16:16:22 LONGITUDE: -1 42.1



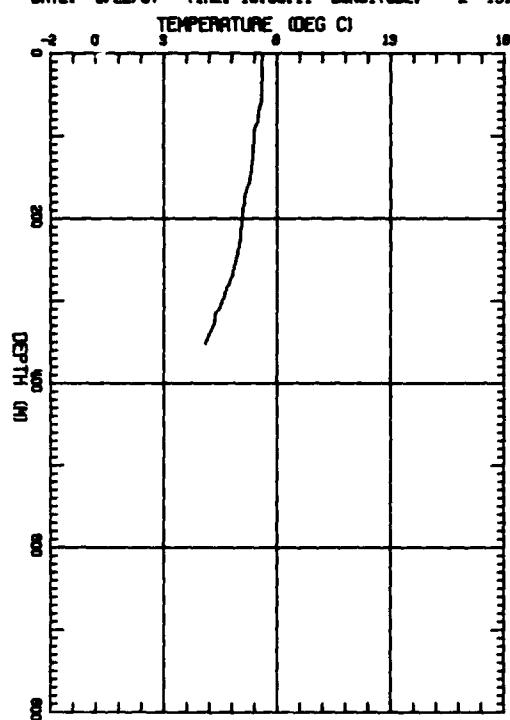
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 368 CHANNEL: 12 LATITUDE: 09 39.3
DATE: 5/22/87 TIME: 16:28:42 LONGITUDE: -2 1.0



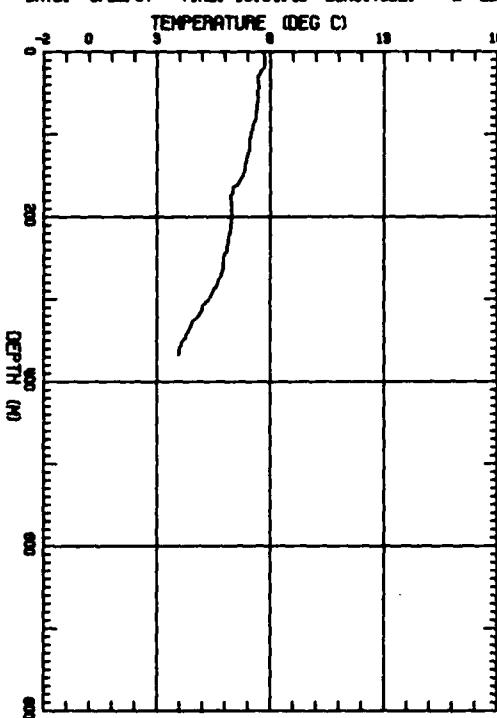
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 369 CHANNEL: 16 LATITUDE: 09 12.6
DATE: 5/22/87 TIME: 16:30:45 LONGITUDE: -2 0.7



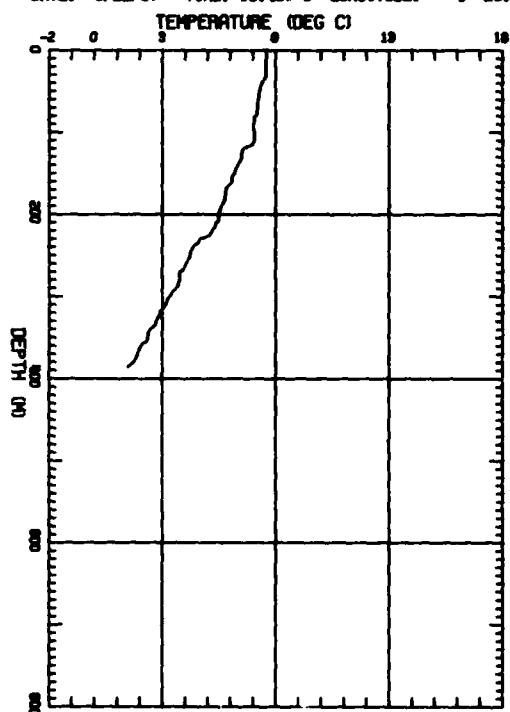
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 361 CHANNEL: 12 LATITUDE: 62 52.6
DATE: 5/22/87 TIME: 16:38:11 LONGITUDE: -2 -15.9



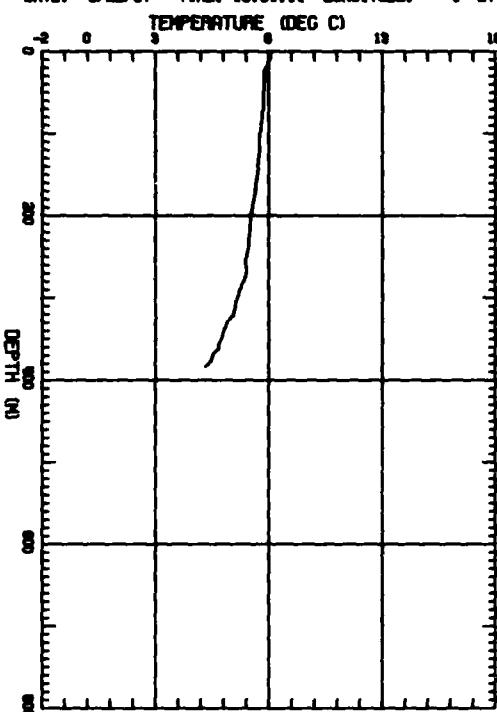
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 362 CHANNEL: 14 LATITUDE: 62 53.6
DATE: 5/22/87 TIME: 16:34:08 LONGITUDE: -2 -22.6



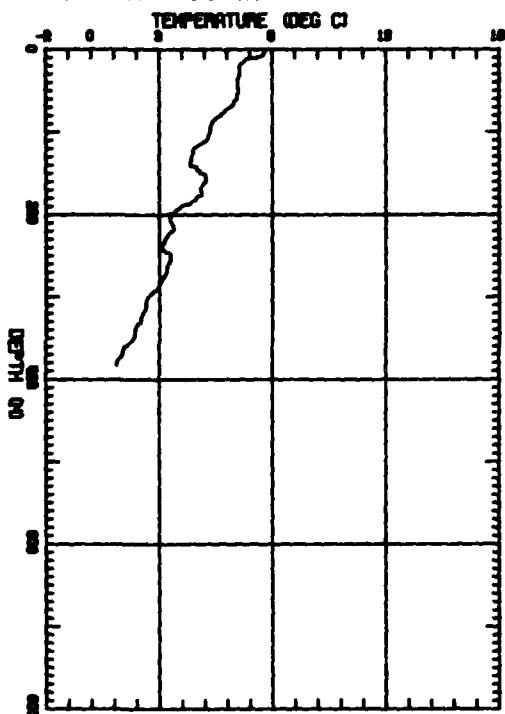
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 363 CHANNEL: 16 LATITUDE: 62 57.4
DATE: 5/22/87 TIME: 16:45:5 LONGITUDE: -2 -29.8



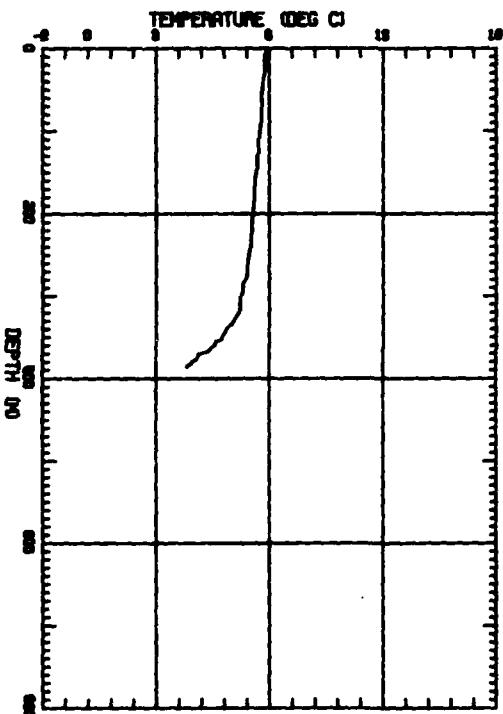
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 364 CHANNEL: 16 LATITUDE: 62 63.7
DATE: 5/22/87 TIME: 16:51:11 LONGITUDE: -2 -27.1



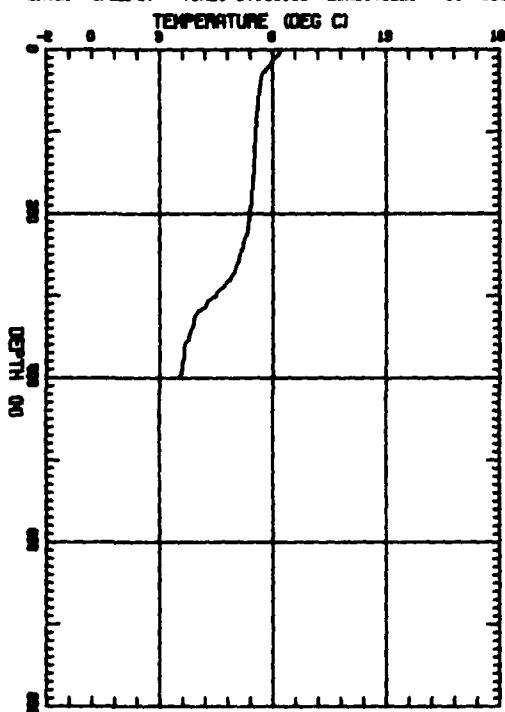
PROJECT: TACTICAL GEOPHYSICS
DROP NO.: 306 CHANNEL: 12 LATITUDE: 62 55.3
DATE: 5/22/87 TIME: 18:57:52 LONGITUDE: -6 -28.3



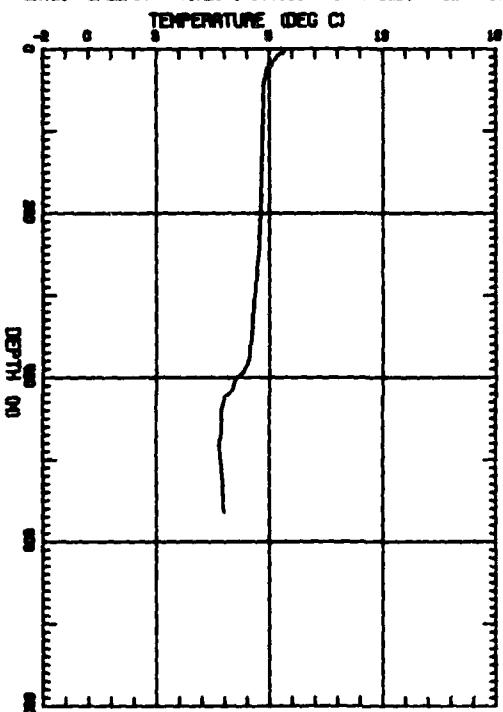
PROJECT: TACTICAL GEODESY
DROP NO.: 387 CHANNEL: 12 LATITUDE: 62 55.1
DATE: 5/22/87 TIME: 17:12:00 LONGITUDE: -7 37.9



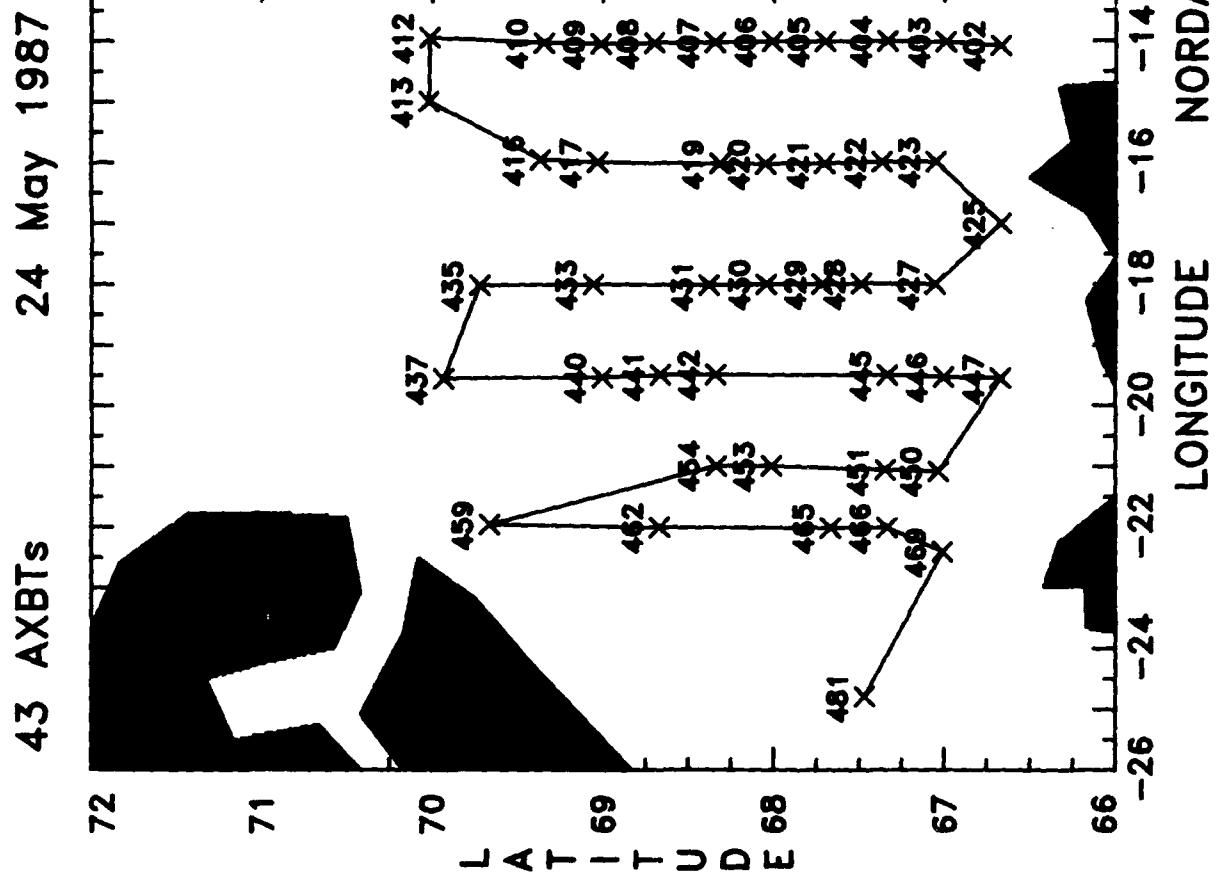
PROJECT: TACTICAL SCENOGRAHY
DROPO NO: 400 CHANNEL: 12 LATITUDE: 69 2.8
DATE: 5/22/87 TIME: 17:31:30 LONGITUDE: -10 -55.1



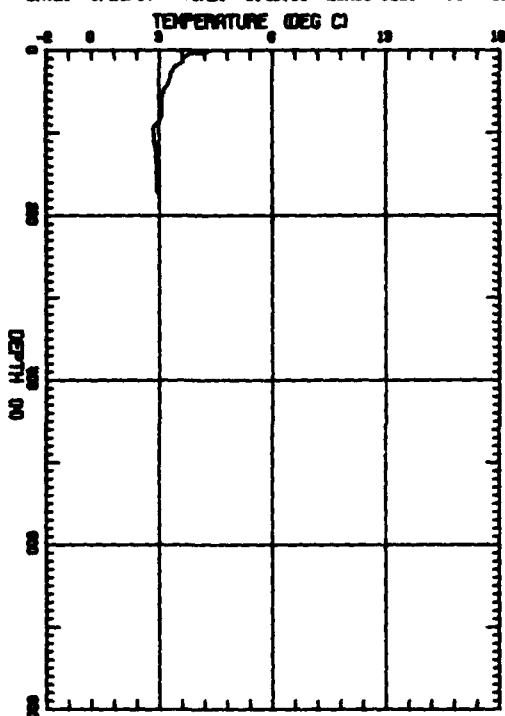
PROJECT: TACTICAL OCENOGRAPHY
DROP NO: 401 CHANNEL: 12 LATITUDE: 68 3.7
DATE: 5/22/87 TIME: 17:37:58 LONGITUDE: -12 4.7



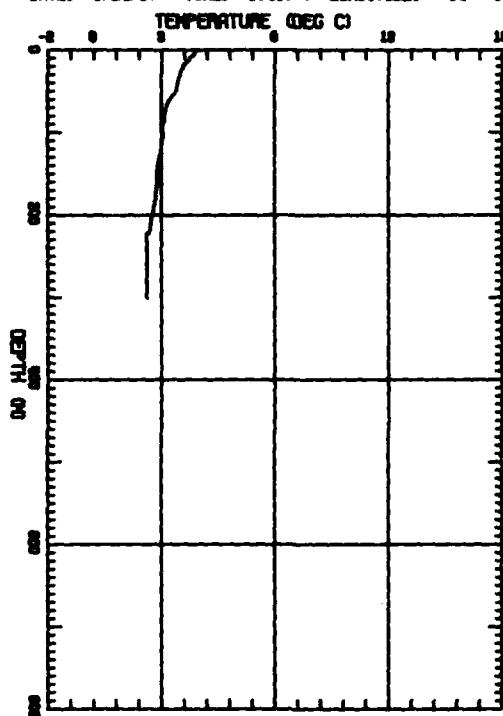
Appendix E.
Drop Positions and Data Profiles, Flight 5,
24 May 1987, Iceland Sea.



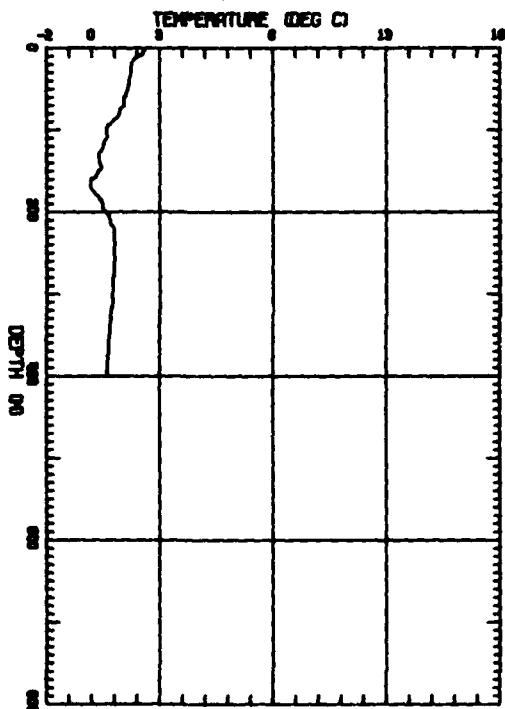
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 802 CHANNEL: 12 LATITUDE: 88 40.2
DATE: 5/26/87 TIME: 9:40:50 LONGITUDE: -16 41.8



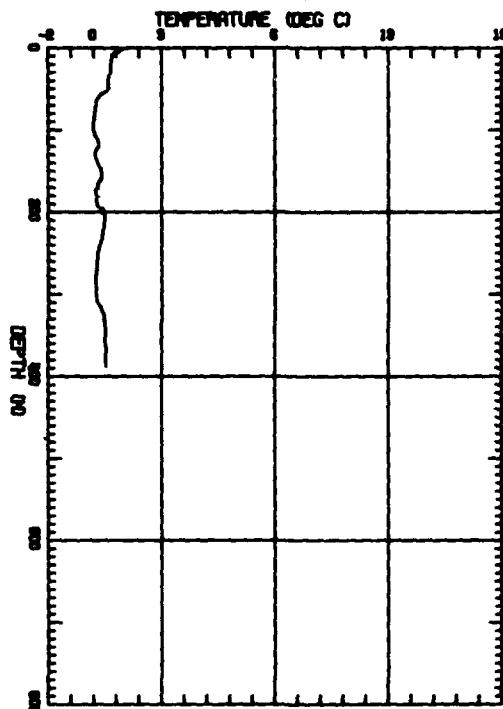
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 803 CHANNEL: 16 LATITUDE: 88 59.5
DATE: 5/26/87 TIME: 9:45:7 LONGITUDE: -16 1.3



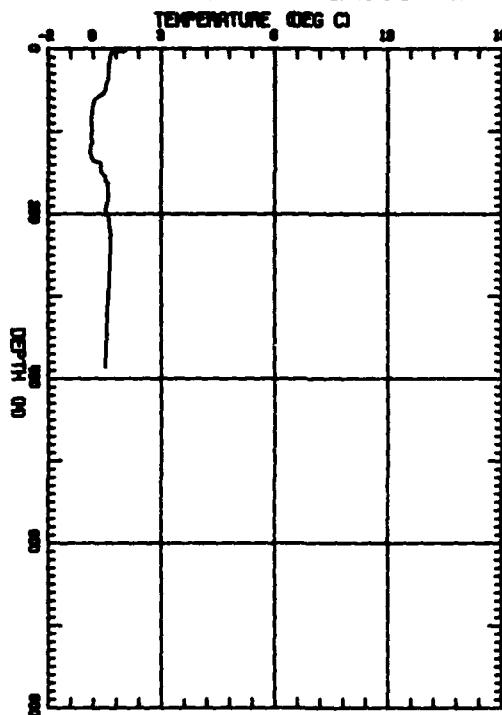
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 804 CHANNEL: 16 LATITUDE: 87 20.0
DATE: 5/26/87 TIME: 9:48:12 LONGITUDE: -16 -8



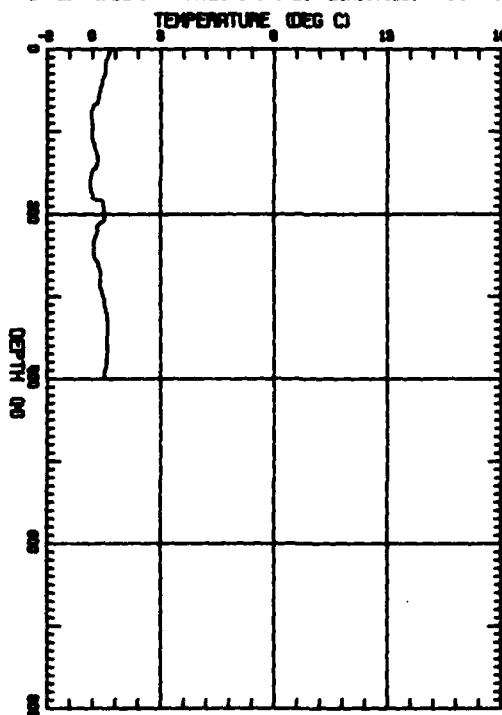
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 805 CHANNEL: 12 LATITUDE: 87 61.9
DATE: 5/26/87 TIME: 9:49:35 LONGITUDE: -16 -.7



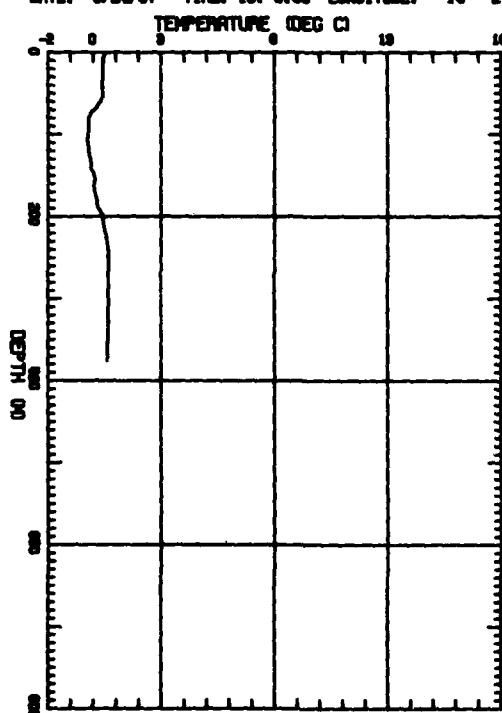
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 400 CHANNEL: 16 LATITUDE: 00 .5
DATE: 5/26/87 TIME: 0657:10 LONGITUDE: -14 -.8



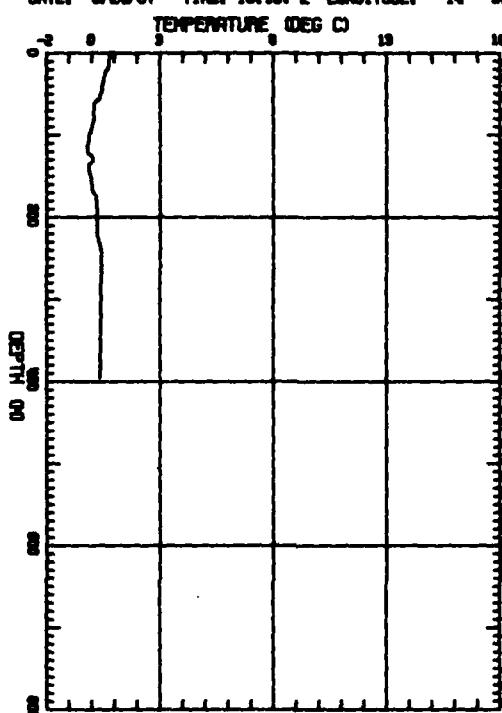
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 407 CHANNEL: 16 LATITUDE: 00 20.8
DATE: 5/26/87 TIME: 10:1:20 LONGITUDE: -14 -1.0



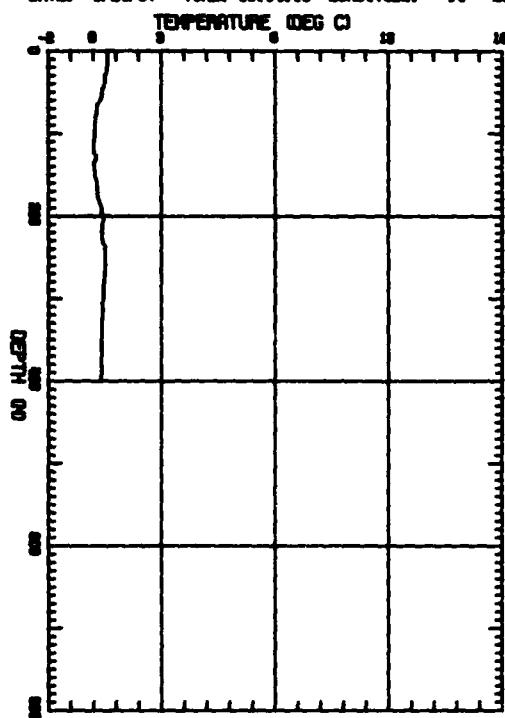
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 400 CHANNEL: 12 LATITUDE: 00 41.0
DATE: 5/26/87 TIME: 10:5:59 LONGITUDE: -14 -2.8



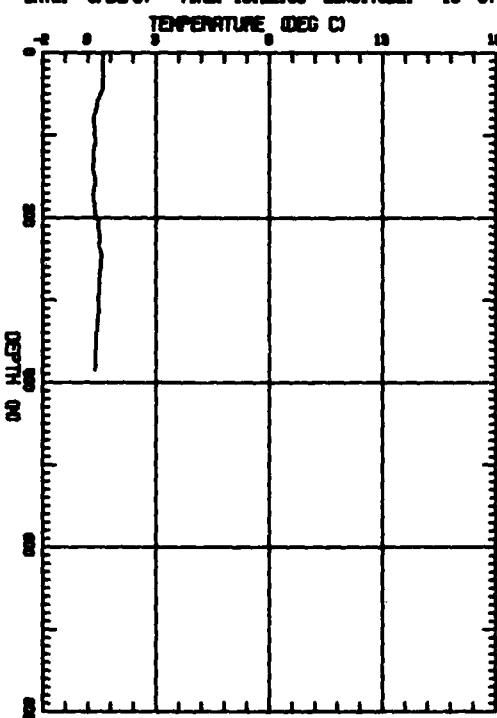
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 400 CHANNEL: 16 LATITUDE: 00 .8
DATE: 5/26/87 TIME: 10:10: 2 LONGITUDE: -14 -3.3



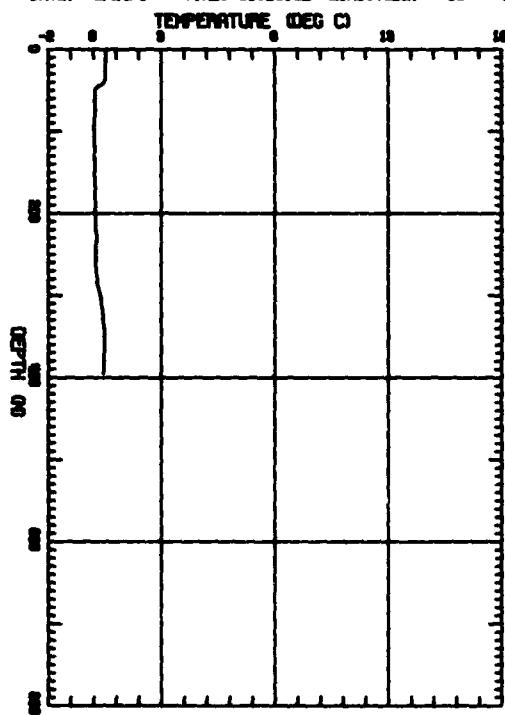
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 410 CHANNEL: 16 LATITUDE: 00 20.0
DATE: 5/26/87 TIME: 10:16:13 LONGITUDE: -15 -2.5



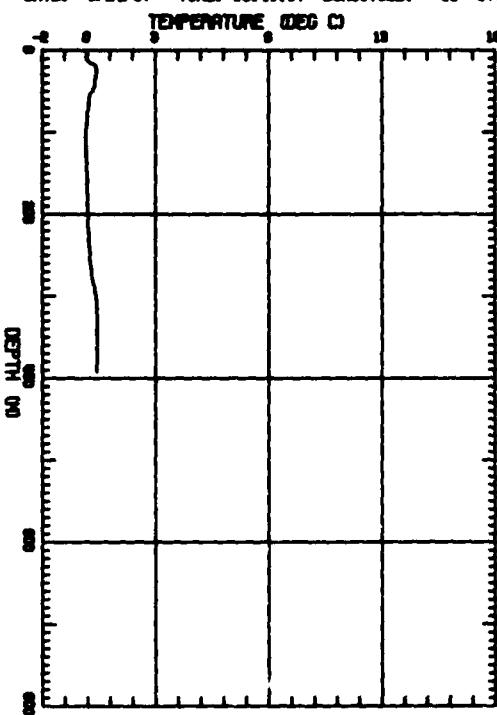
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 412 CHANNEL: 16 LATITUDE: 00 20.0
DATE: 5/26/87 TIME: 10:22:03 LONGITUDE: -15 -57.0



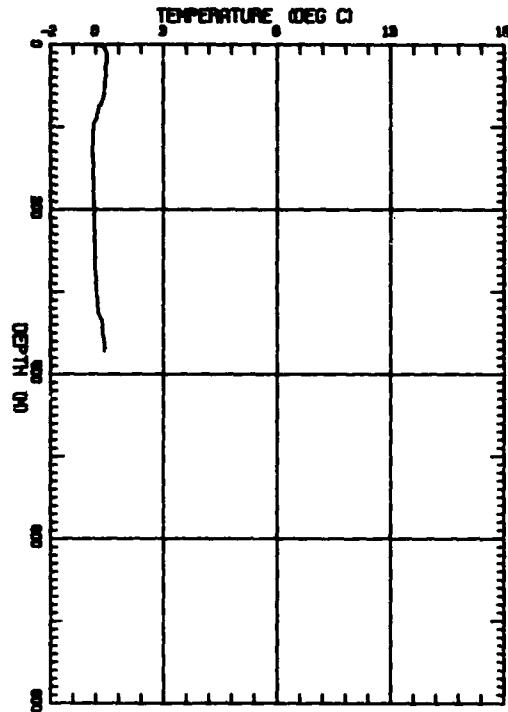
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 413 CHANNEL: 12 LATITUDE: 00 21.1
DATE: 5/26/87 TIME: 10:26:32 LONGITUDE: -15 .0



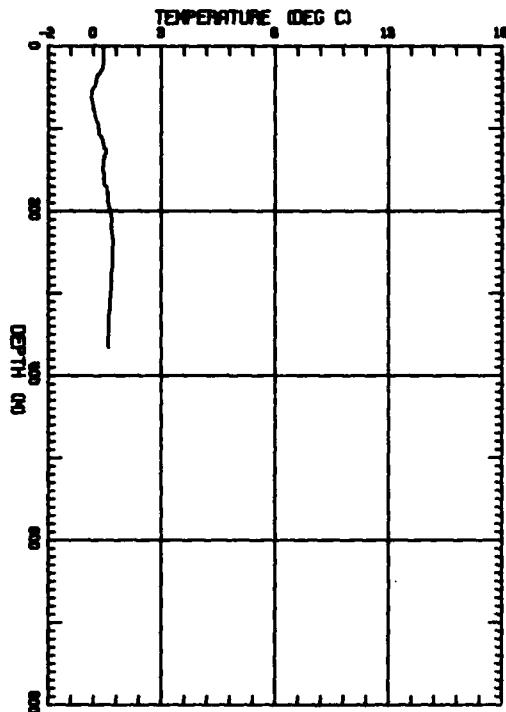
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 418 CHANNEL: 16 LATITUDE: 00 21.8
DATE: 5/26/87 TIME: 10:41:17 LONGITUDE: -15 -57.6



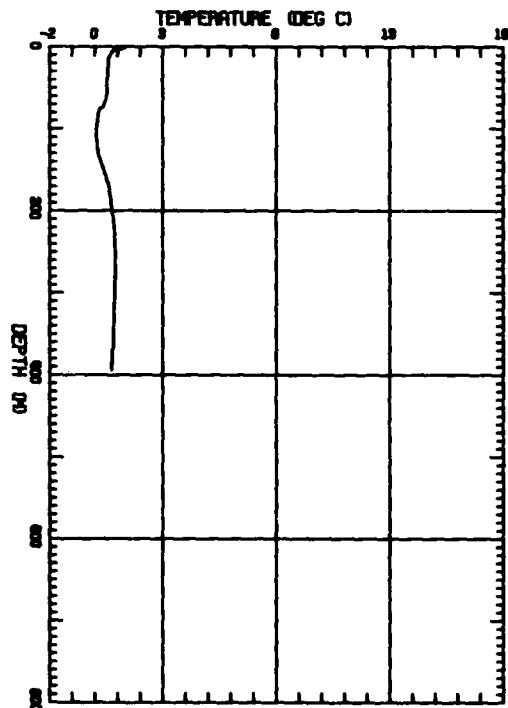
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 417 CHANNEL: 12 LATITUDE: 88 1.8
DATE: 5/26/87 TIME: 10:45:28 LONGITUDE: -16 0



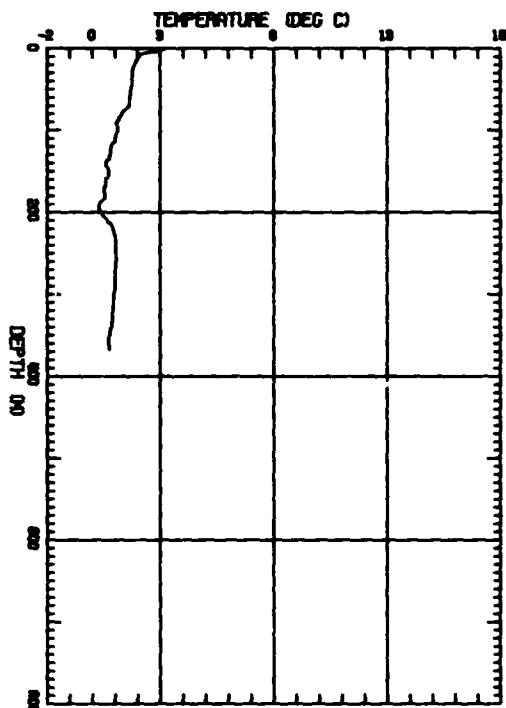
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 418 CHANNEL: 18 LATITUDE: 88 16.8
DATE: 5/26/87 TIME: 10:54:28 LONGITUDE: -16 -1.5



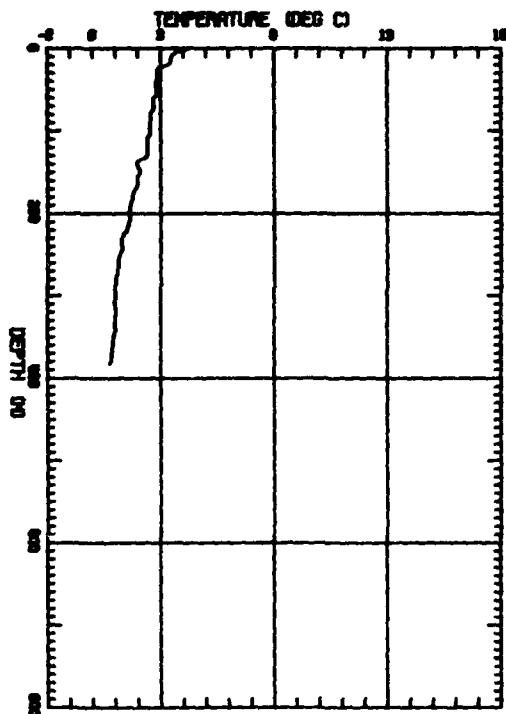
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 420 CHANNEL: 12 LATITUDE: 88 2.7
DATE: 5/26/87 TIME: 10:57:55 LONGITUDE: -16 -1.6



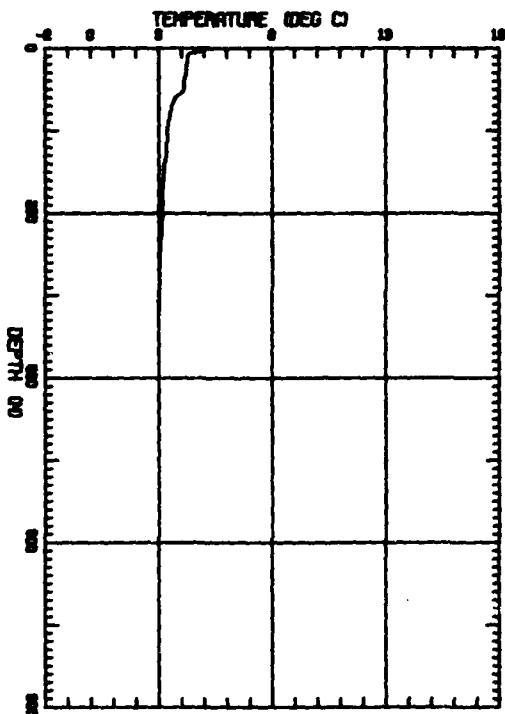
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 421 CHANNEL: 14 LATITUDE: 87 62.0
DATE: 5/26/87 TIME: 11: 2:11 LONGITUDE: -16 -.9



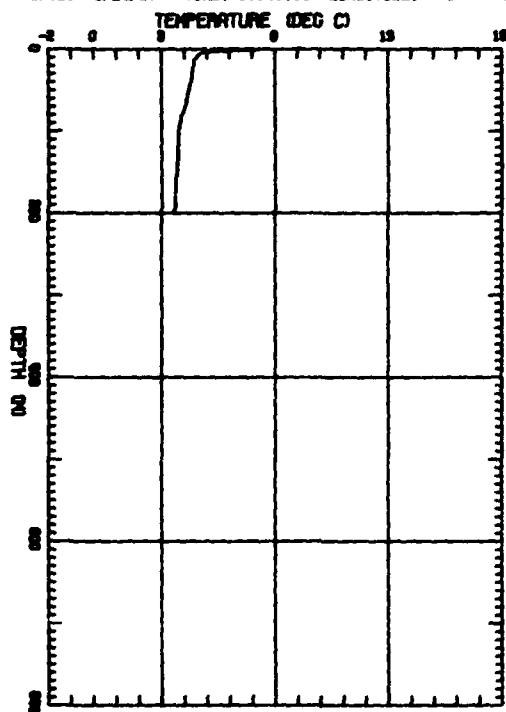
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 622 CHANNEL: 12 LATITUDE: 67 21.0
DATE: 5/26/87 TIME: 11: 04:16 LONGITUDE: -15 -59.0



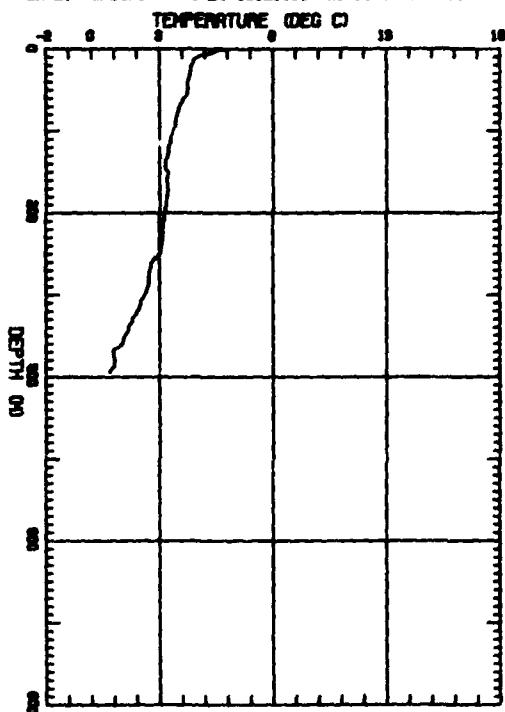
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 623 CHANNEL: 16 LATITUDE: 67 2.6
DATE: 5/26/87 TIME: 11: 04:57 LONGITUDE: -15 -59.5



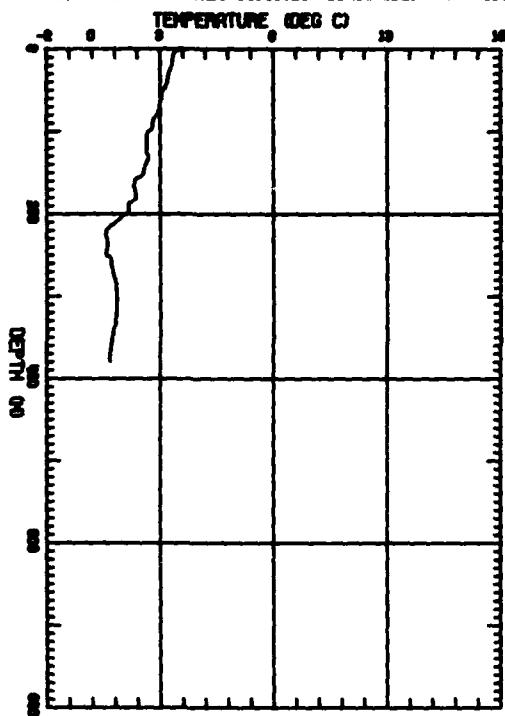
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 625 CHANNEL: 12 LATITUDE: 68 40.2
DATE: 5/26/87 TIME: 11:10:10 LONGITUDE: -17 0.0



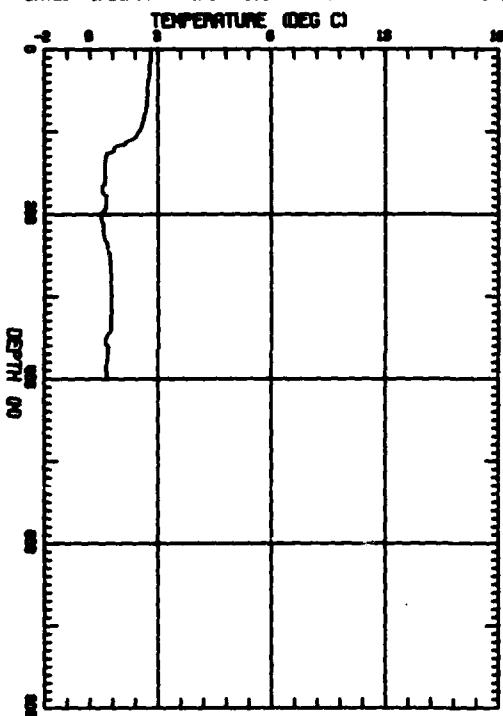
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO.: 627 CHANNEL: 16 LATITUDE: 67 3.2
DATE: 5/26/87 TIME: 11:20:11 LONGITUDE: -18 -1.1



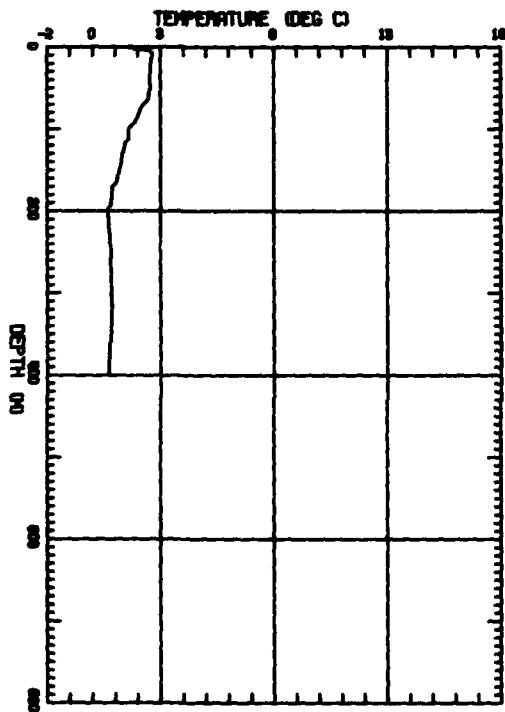
PROJECT: TACTICAL SCENICROPHY
DROP NO: 430 CHANNEL: 16 LATITUDE: 67 28.2
DATE: 5/26/87 TIME: 11:38:28 LONGITUDE: -17 58.6



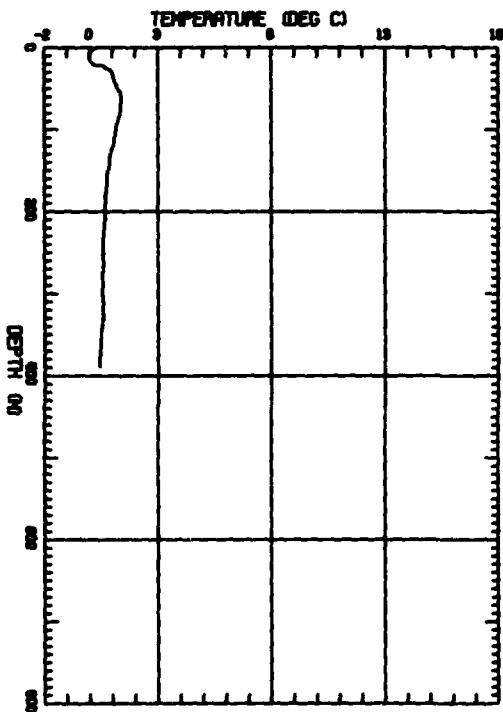
PROJECT: TACTICAL SCENICROPHY
DROP NO: 430 CHANNEL: 12 LATITUDE: 67 63.0
DATE: 5/26/87 TIME: 11:38:5 LONGITUDE: -17 58.6



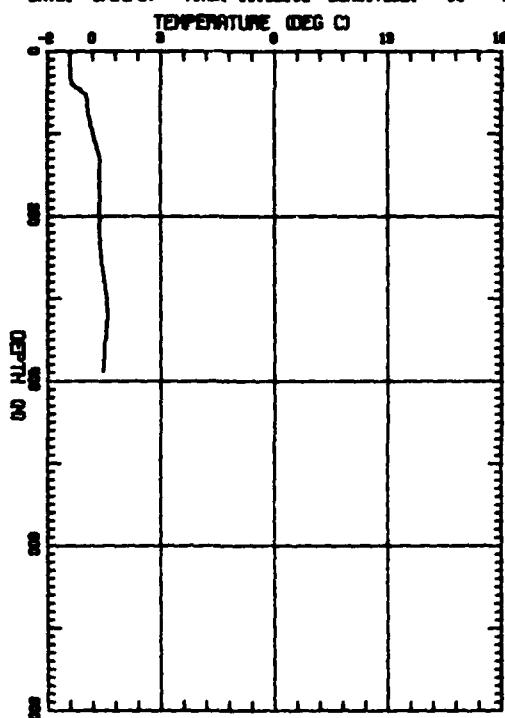
PROJECT: TACTICAL SCENICROPHY
DROP NO: 430 CHANNEL: 16 LATITUDE: 68 2.6
DATE: 5/26/87 TIME: 11:40:18 LONGITUDE: -18 1.1



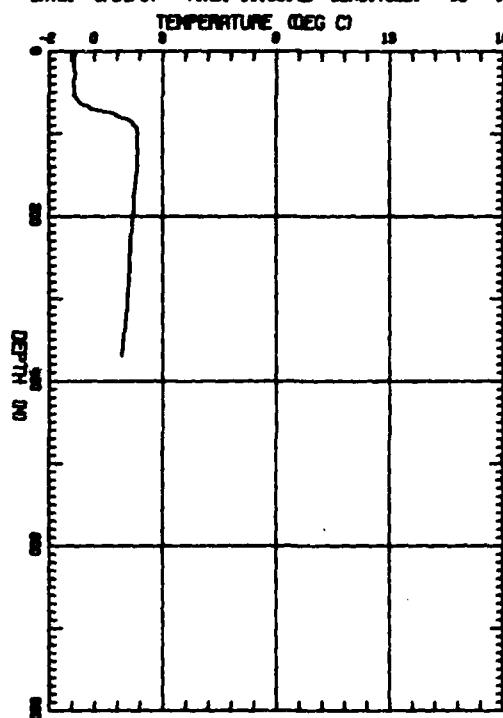
PROJECT: TACTICAL SCENICROPHY
DROP NO: 431 CHANNEL: 16 LATITUDE: 68 22.7
DATE: 5/26/87 TIME: 11:40:2 LONGITUDE: -18 1.1



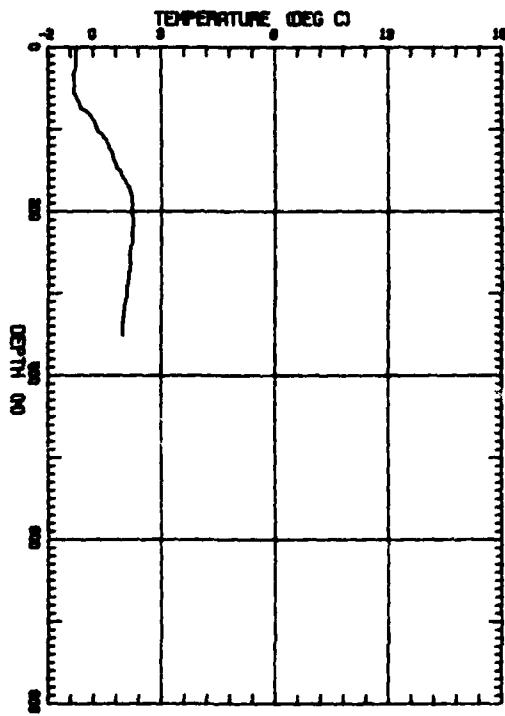
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 433 CHANNEL: 16 LATITUDE: 08 3.4
DATE: 5/26/87 TIME: 11:52:13 LONGITUDE: -10 -3.8



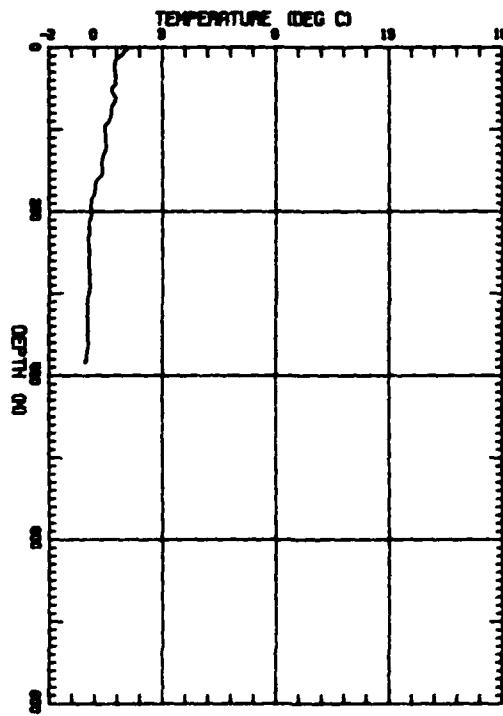
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 435 CHANNEL: 12 LATITUDE: 08 33.4
DATE: 5/26/87 TIME: 11:58:42 LONGITUDE: -10 -1.4



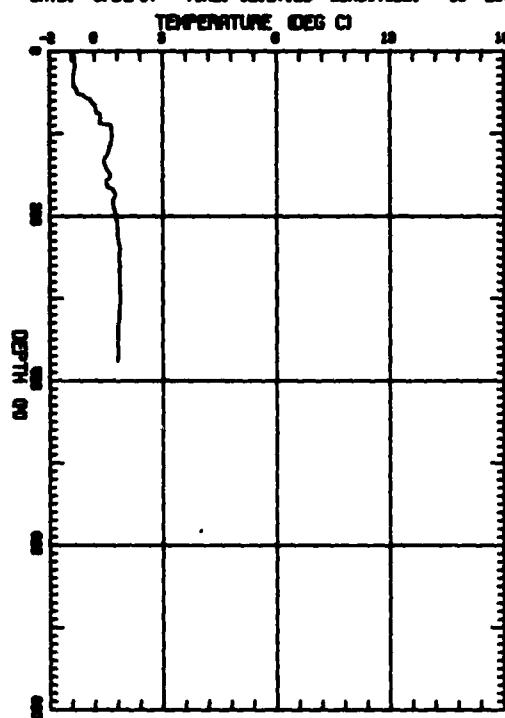
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 437 CHANNEL: 16 LATITUDE: 08 35.8
DATE: 5/26/87 TIME: 12:11:16 LONGITUDE: -10 -33.4



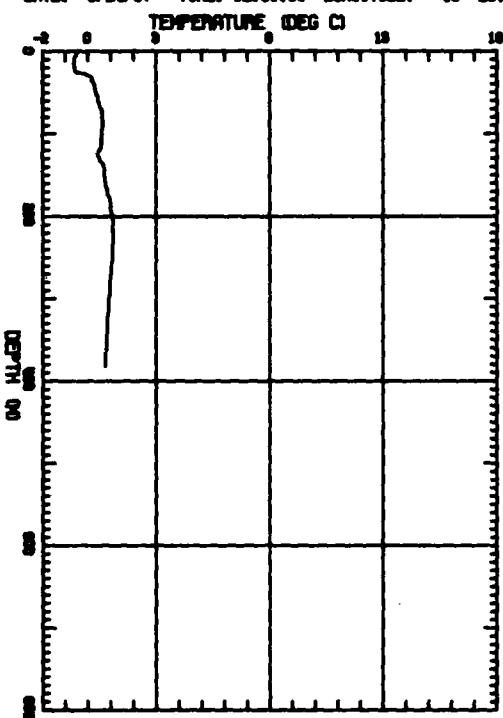
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 440 CHANNEL: 16 LATITUDE: 08 .1
DATE: 5/26/87 TIME: 12:29:21 LONGITUDE: -10 -32.0



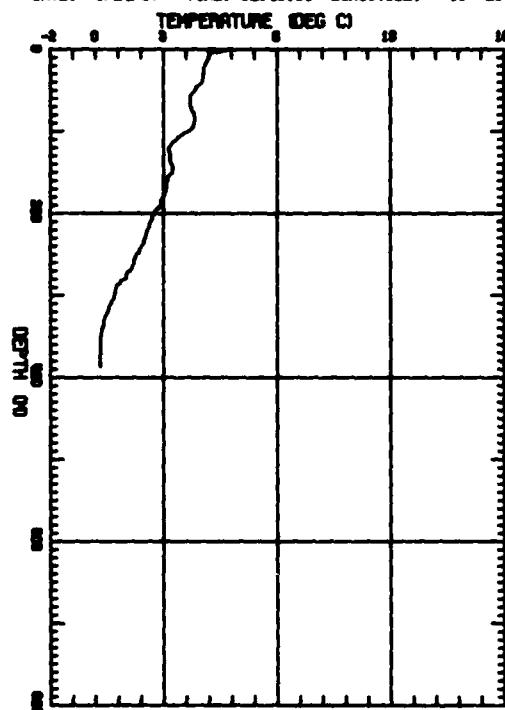
PROJECT: TACTICAL OCENOGRAHY
DRP NO: W62 CHANNEL: 12 LATITUDE: 00 39.7
DATE: 5/26/87 TIME: 12:27:28 LONGITUDE: -10 28.5



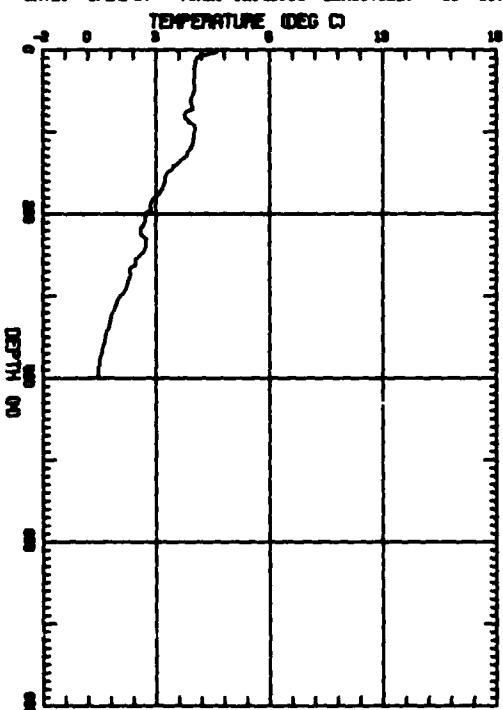
PROJECT: TACTICAL OCENOGRAHY
DRP NO: W62 CHANNEL: 16 LATITUDE: 00 20.2
DATE: 5/26/87 TIME: 12:31:31 LONGITUDE: -10 28.9



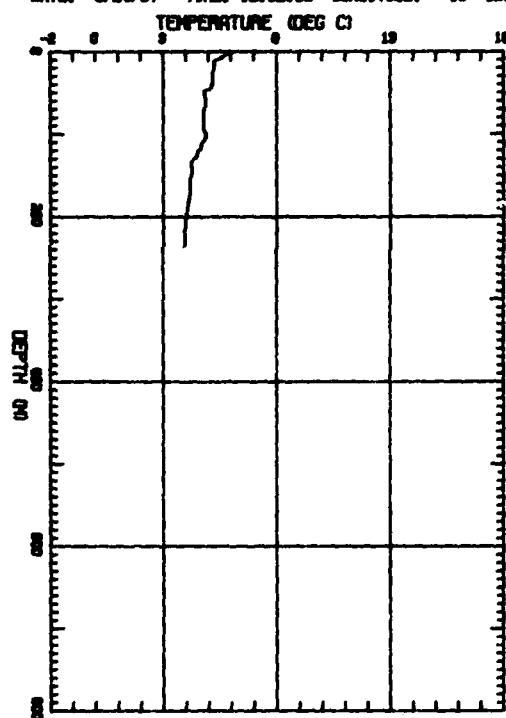
PROJECT: TACTICAL OCENOGRAHY
DRP NO: W65 CHANNEL: 16 LATITUDE: 07 19.8
DATE: 5/26/87 TIME: 12:43:50 LONGITUDE: -10 28.6



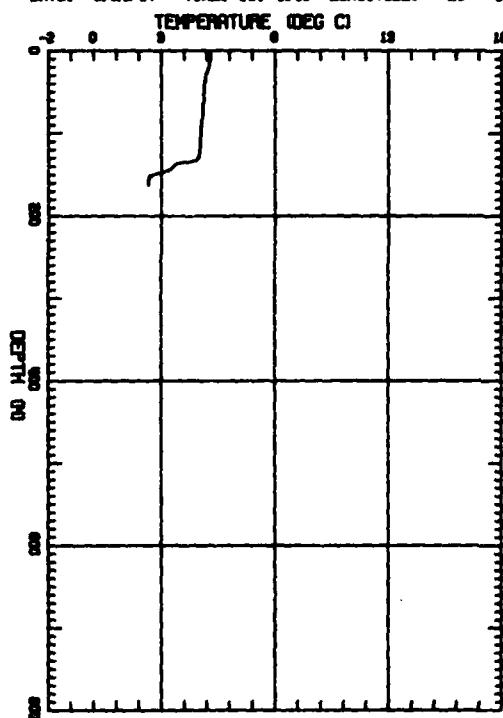
PROJECT: TACTICAL OCENOGRAHY
DRP NO: W65 CHANNEL: 16 LATITUDE: 07 .1
DATE: 5/26/87 TIME: 12:48:19 LONGITUDE: -10 28.6



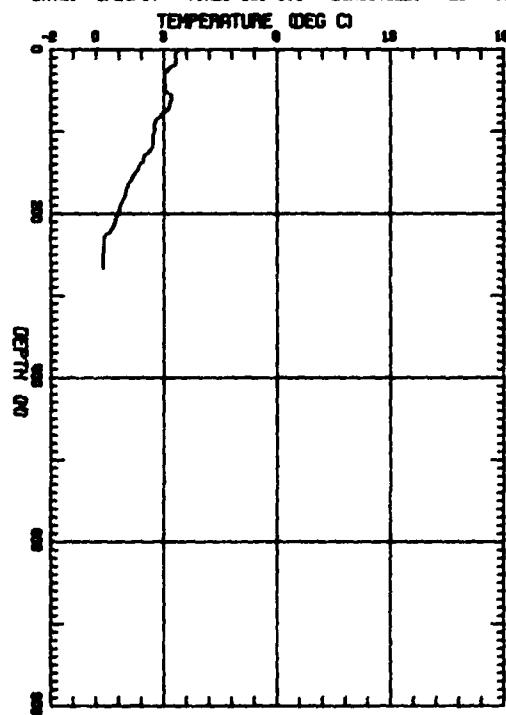
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 467 CHANNEL: 16 LATITUDE: 66 40.2
DATE: 5/24/87 TIME: 12:52:38 LONGITUDE: -18 -32.7



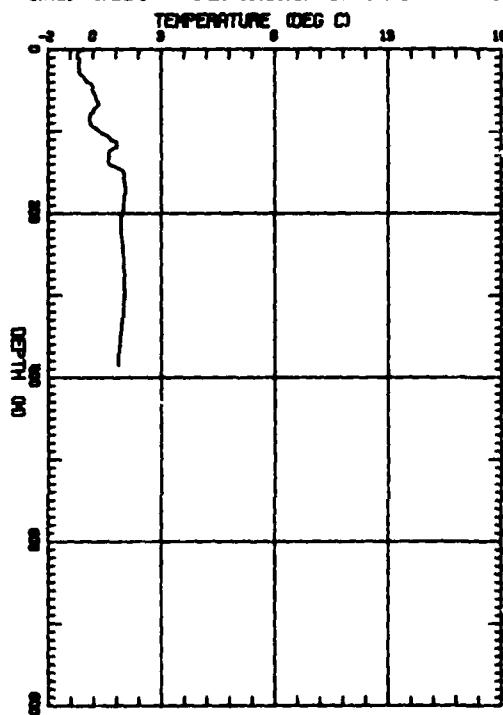
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 468 CHANNEL: 16 LATITUDE: 67 2.1
DATE: 5/24/87 TIME: 13:46:41 LONGITUDE: -21 -4.6



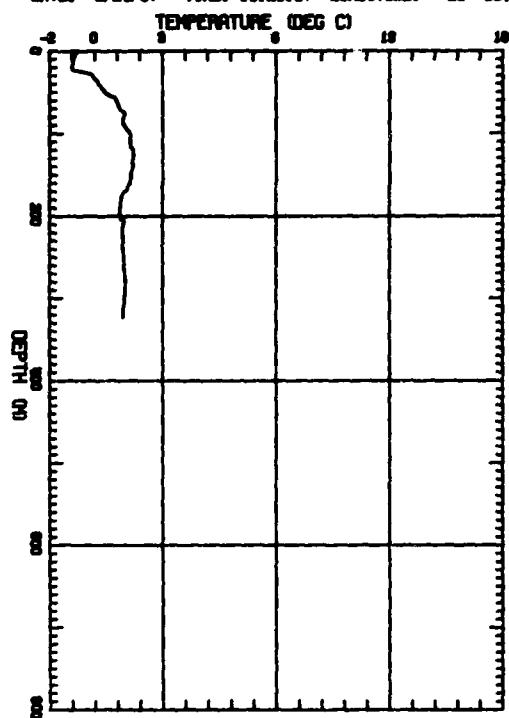
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 461 CHANNEL: 12 LATITUDE: 67 20.8
DATE: 5/24/87 TIME: 13:04:17 LONGITUDE: -21 -3.4



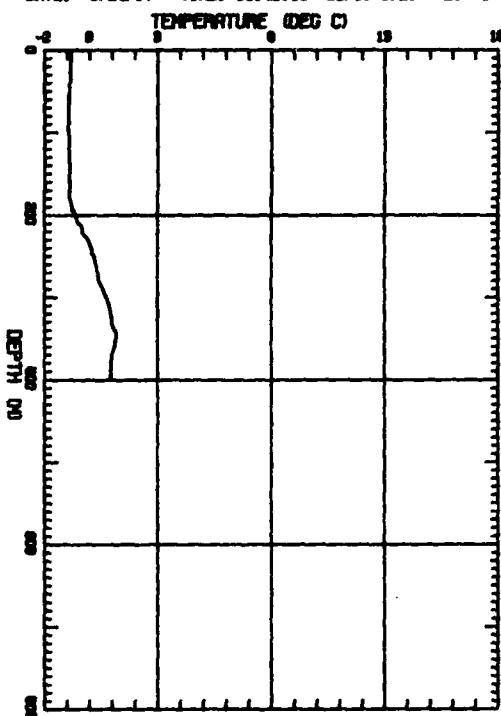
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 463 CHANNEL: 16 LATITUDE: 66 .8
DATE: 5/24/87 TIME: 13:22:28 LONGITUDE: -20 -50.4



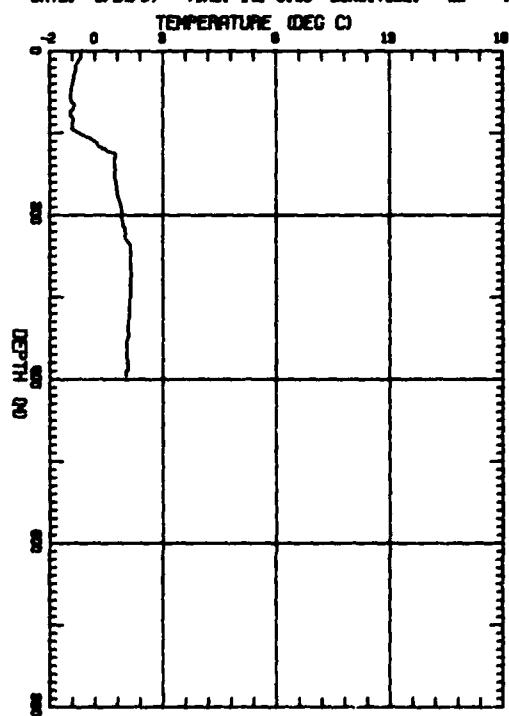
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 462 CHANNEL: 12 LATITUDE: 68 20.1
DATE: 5/24/87 TIME: 18:28:37 LONGITUDE: -20 -58.8



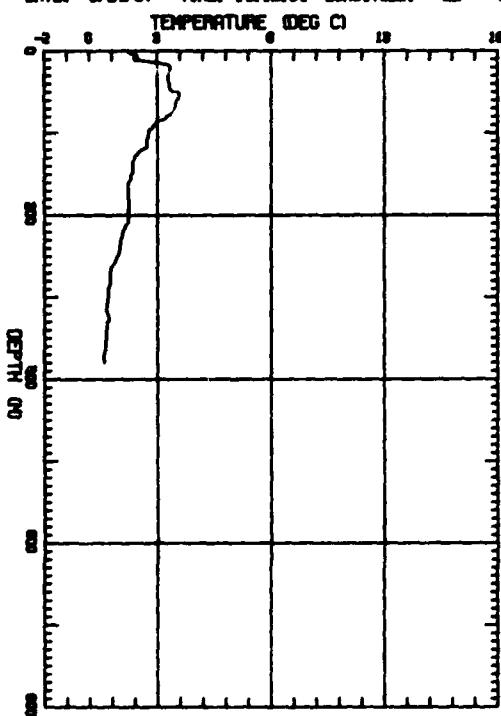
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 462 CHANNEL: 16 LATITUDE: 68 39.8
DATE: 5/24/87 TIME: 18:48:10 LONGITUDE: -21 -57.0



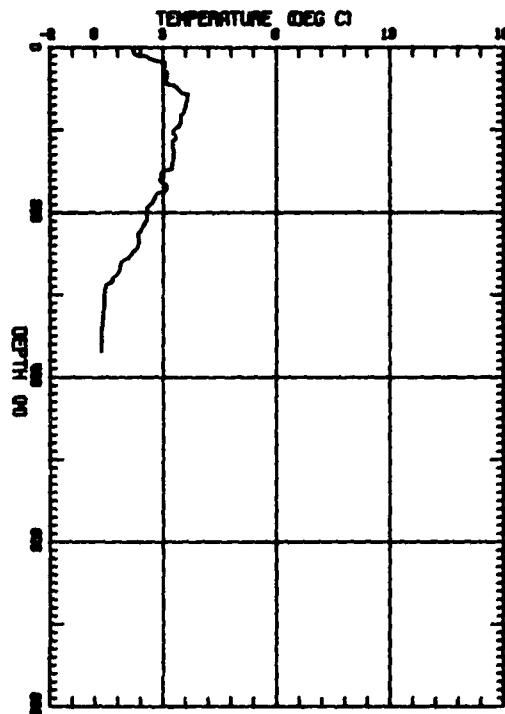
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 462 CHANNEL: 16 LATITUDE: 68 60.0
DATE: 5/24/87 TIME: 18: 0:18 LONGITUDE: -22 -9



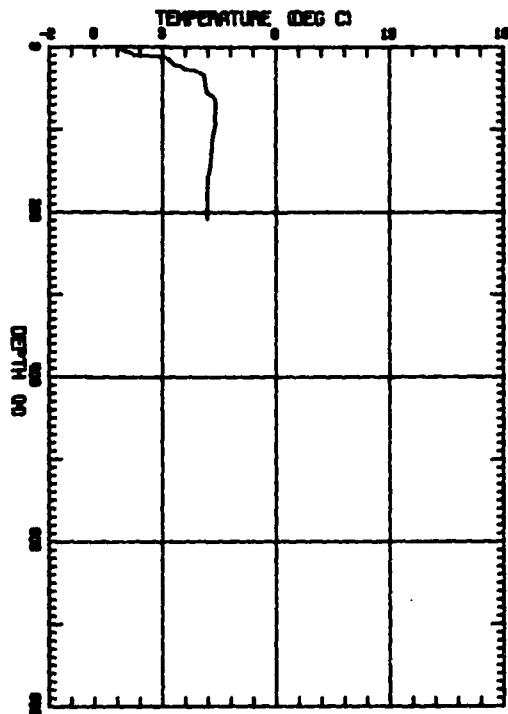
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 462 CHANNEL: 16 LATITUDE: 67 38.6
DATE: 5/24/87 TIME: 18:12:51 LONGITUDE: -22 -.5



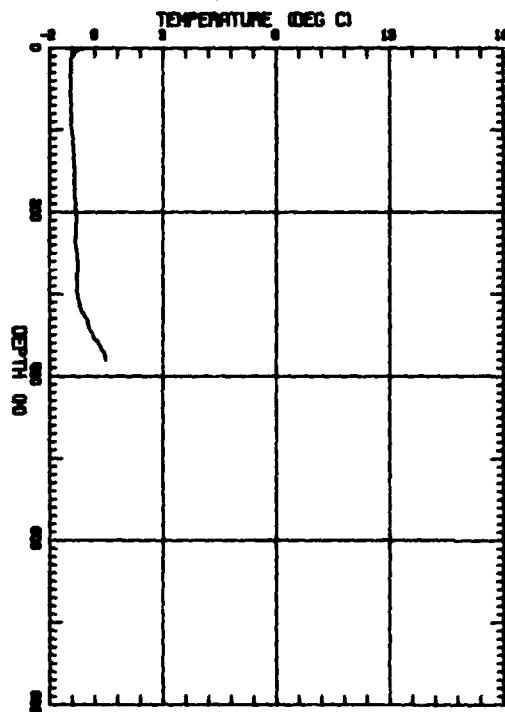
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 800 CHANNEL: 12 LATITUDE: 87 20.0
DATE: 8/26/87 TIME: 16:17:0 LONGITUDE: -22 -5



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 800 CHANNEL: 12 LATITUDE: 87 .5
DATE: 8/26/87 TIME: 16:31:5 LONGITUDE: -22 -26.3



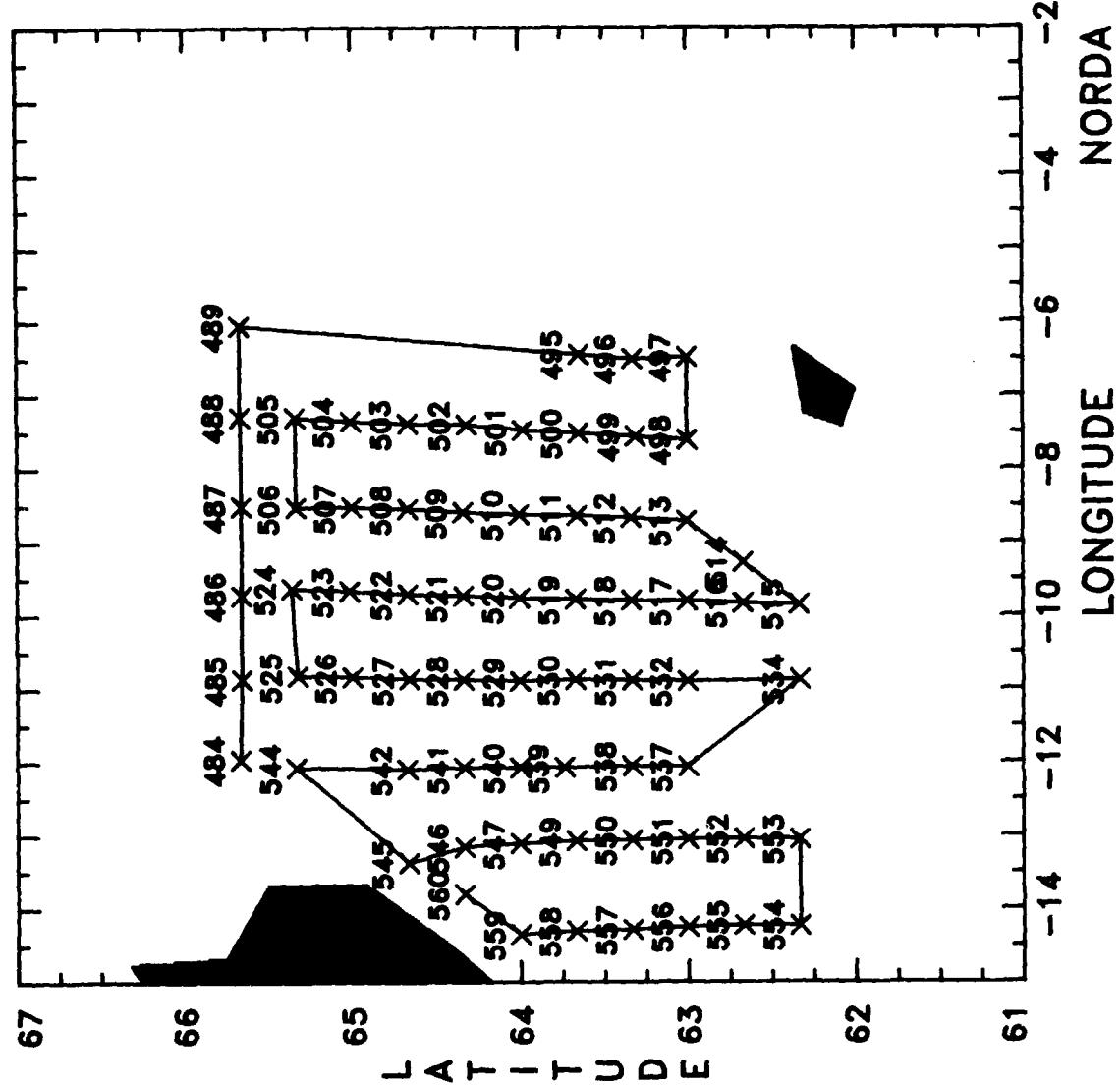
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 801 CHANNEL: 12 LATITUDE: 87 28.1
DATE: 8/26/87 TIME: 15:18:18 LONGITUDE: -24 -47.3



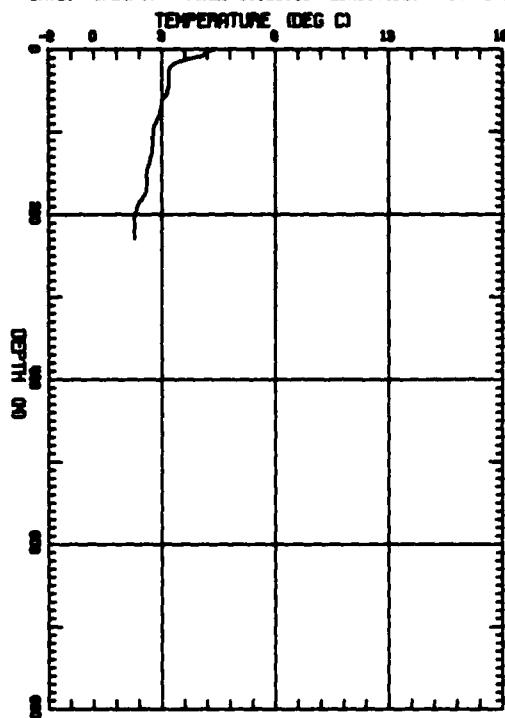
**Appendix F.
Drop Positions and Data Profiles, Flight 6,
26 May 1987, Iceland-Faeroe Frontal Region.**

26 May 1987

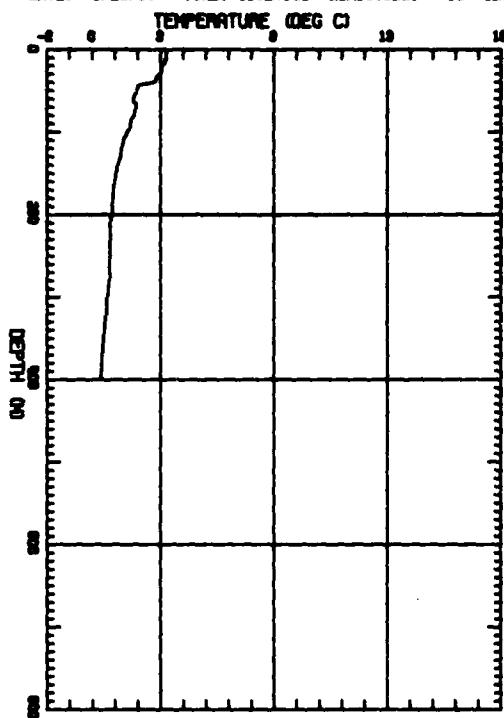
67 AXBTs



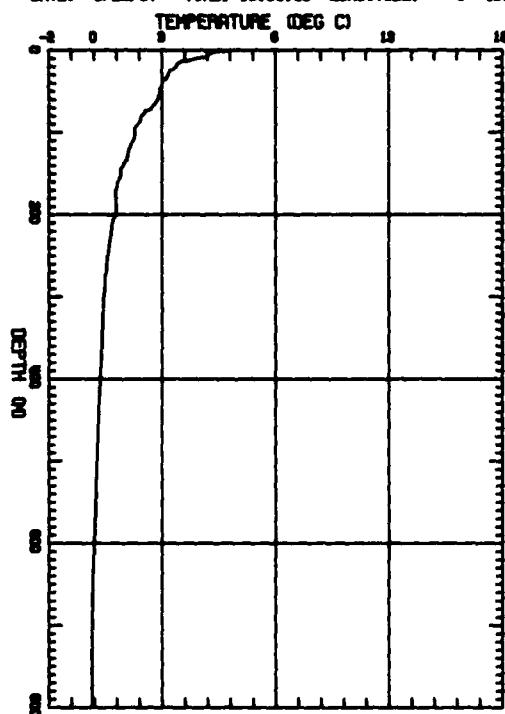
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 488 CHANNEL: 16 LATITUDE: 05 38.0
DATE: 5/28/87 TIME: 10:21:15 LONGITUDE: -10 52.0



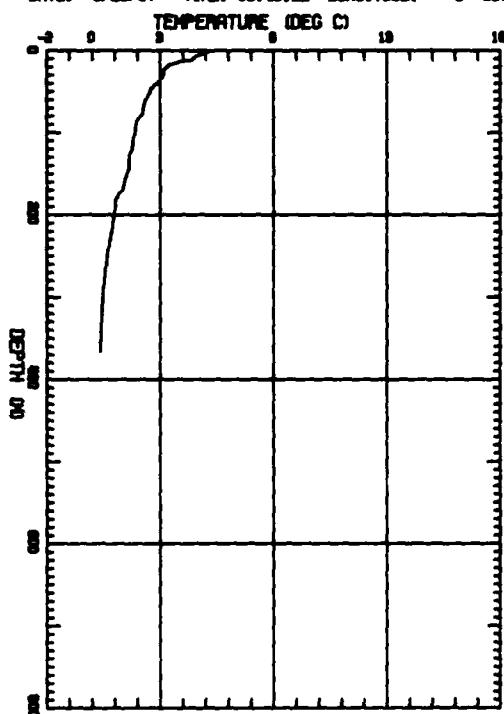
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 488 CHANNEL: 12 LATITUDE: 05 38.6
DATE: 5/28/87 TIME: 10:27:18 LONGITUDE: -10 52.2



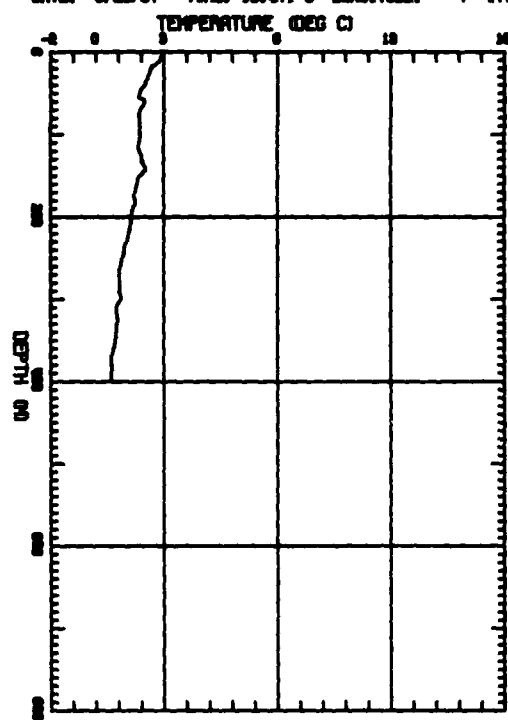
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 488 CHANNEL: 14 LATITUDE: 05 38.6
DATE: 5/28/87 TIME: 10:33:38 LONGITUDE: -10 52.5



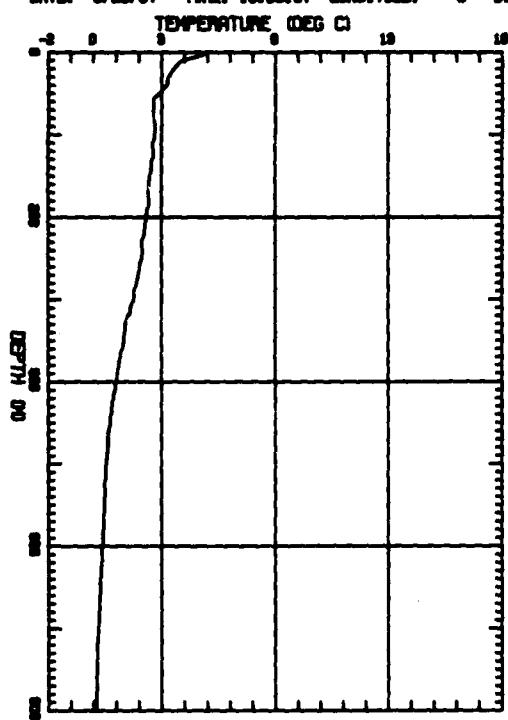
PROJECT: TACTICAL OCENOGRAHY
DROP NO: 487 CHANNEL: 16 LATITUDE: 05 38.6
DATE: 5/28/87 TIME: 10:40:22 LONGITUDE: -10 50.4



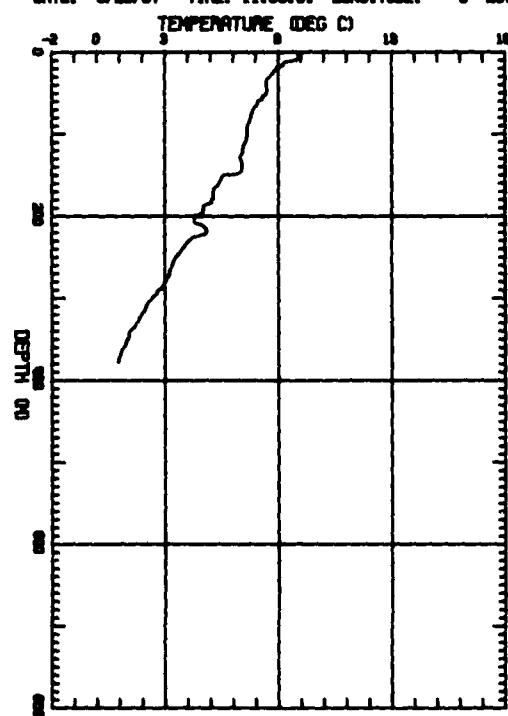
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 600 CHANNEL: 12 LATITUDE: 65 38.0
DATE: 5/28/87 TIME: 10:47:8 LONGITUDE: -6 17.6



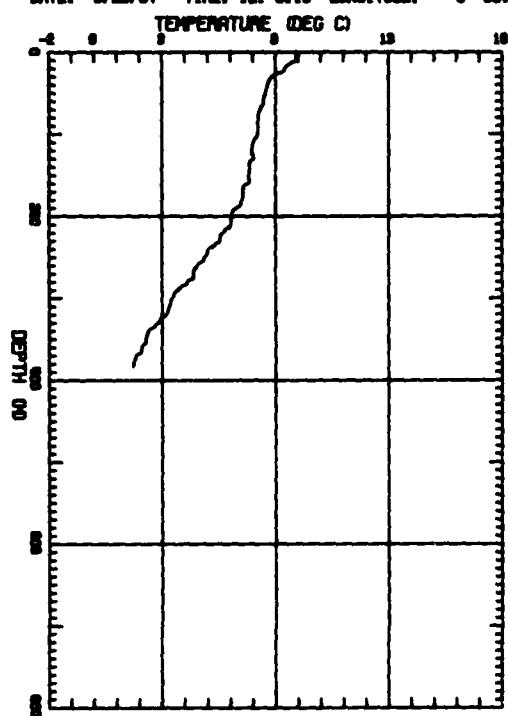
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 600 CHANNEL: 16 LATITUDE: 65 40.0
DATE: 5/28/87 TIME: 10:53:57 LONGITUDE: -6 3.0



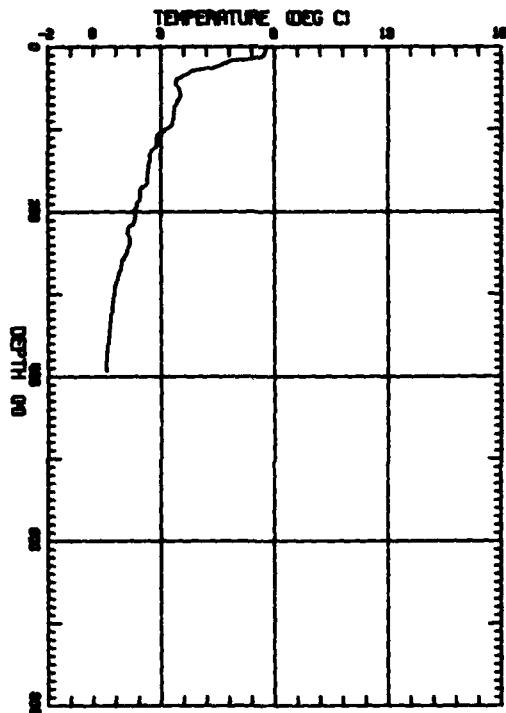
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 600 CHANNEL: 16 LATITUDE: 65 38.7
DATE: 5/28/87 TIME: 11:55:31 LONGITUDE: -6 28.8



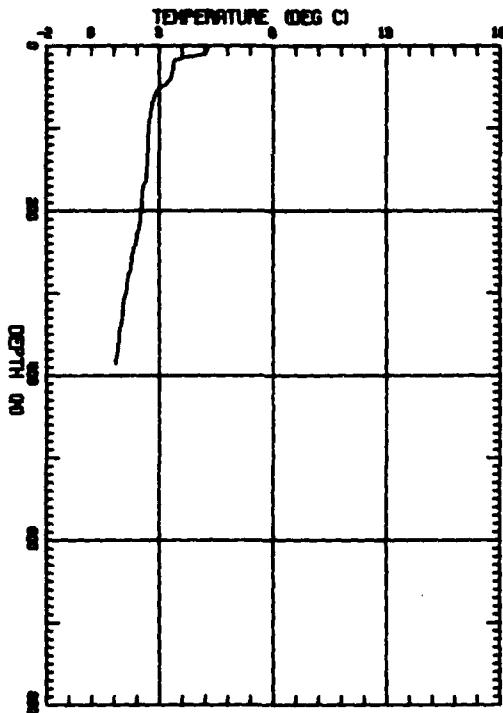
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 600 CHANNEL: 12 LATITUDE: 65 19.8
DATE: 5/28/87 TIME: 12:0:10 LONGITUDE: -6 30.3



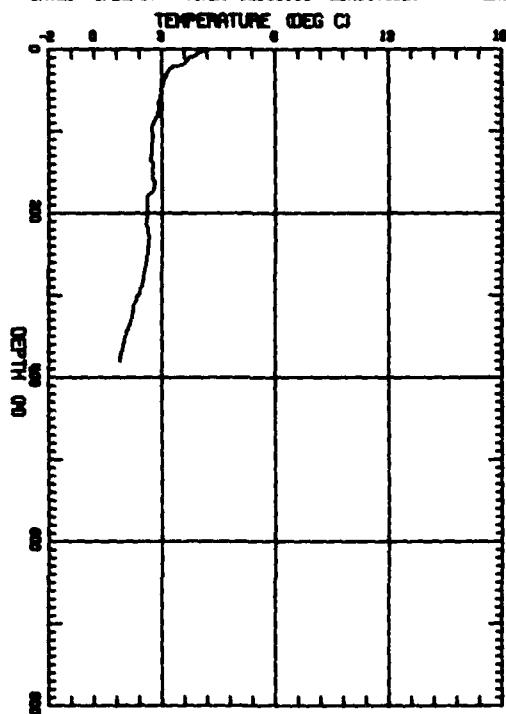
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 501 CHANNEL: 16 LATITUDE: 65 38.6
DATE: 5/28/87 TIME: 12:27:58 LONGITUDE: -7 38.2



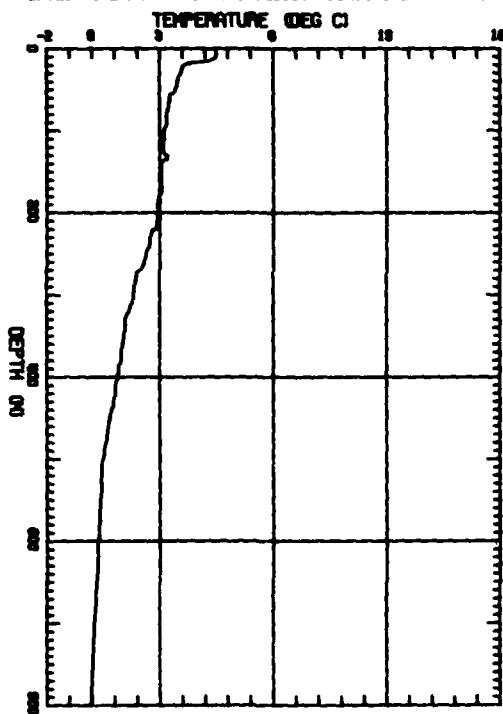
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 502 CHANNEL: 16 LATITUDE: 65 18.6
DATE: 5/28/87 TIME: 12:35:10 LONGITUDE: -7 38.1



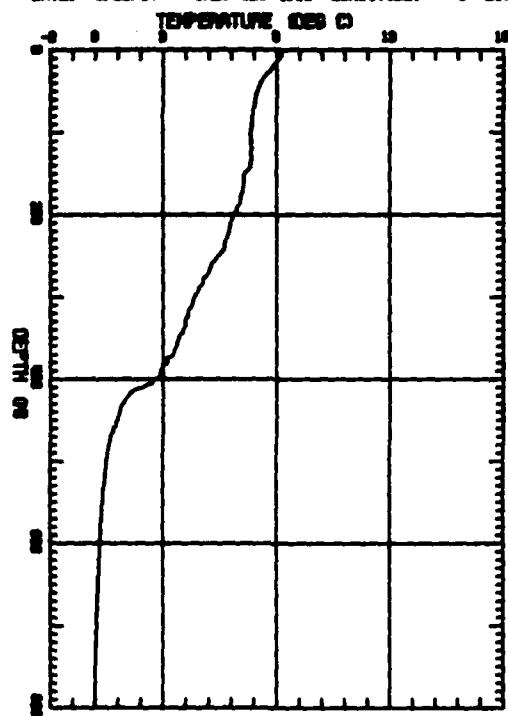
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 503 CHANNEL: 12 LATITUDE: 65 38.6
DATE: 5/28/87 TIME: 12:38:38 LONGITUDE: -7 32.6



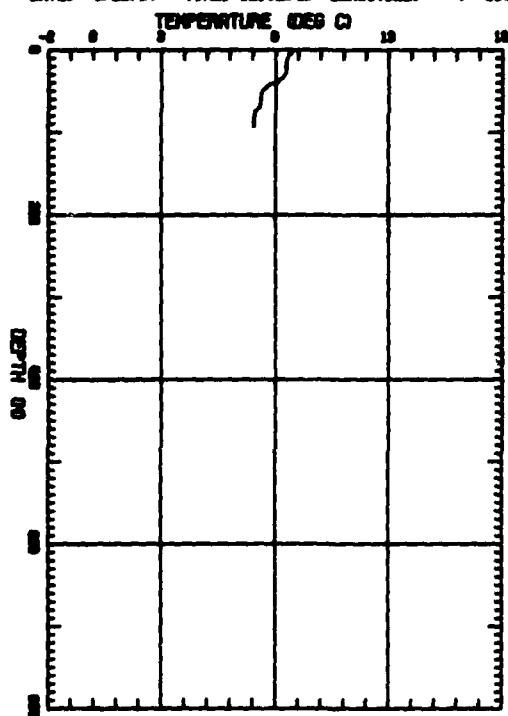
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 504 CHANNEL: 16 LATITUDE: 65 .4
DATE: 5/28/87 TIME: 12:43:57 LONGITUDE: -7 21.0



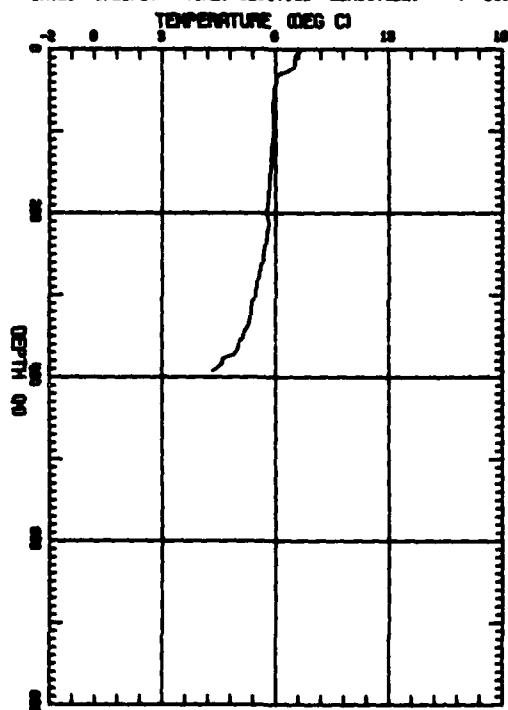
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 887 CHANNEL: 16 LATITUDE: 88 .0
DATE: 5/28/87 TIME: 12:00:00 LONGITUDE: -7 -88.0



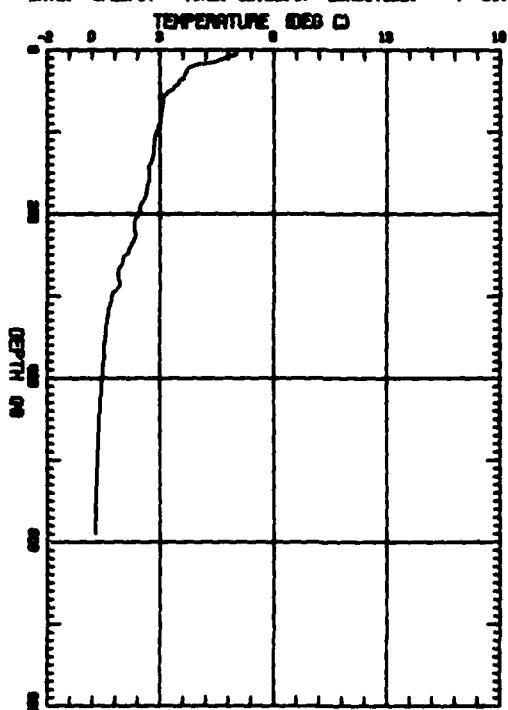
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 888 CHANNEL: 16 LATITUDE: 88 .0
DATE: 5/28/87 TIME: 12:12:00 LONGITUDE: -7 -88.0



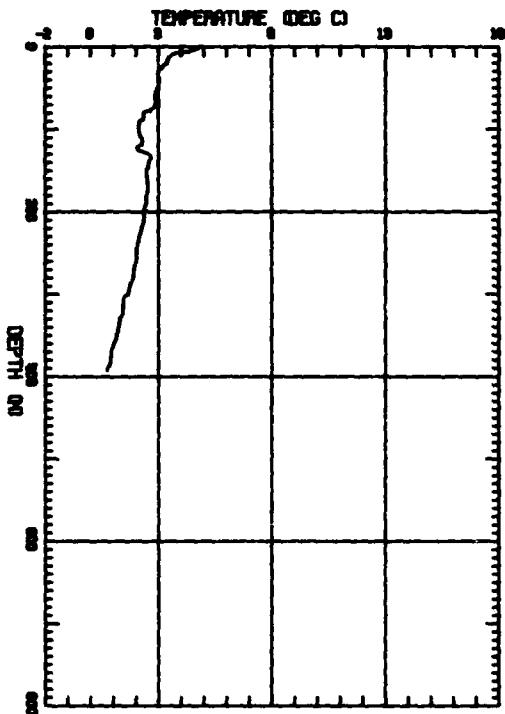
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 888 CHANNEL: 12 LATITUDE: 88 10.5
DATE: 5/28/87 TIME: 12:17:35 LONGITUDE: -7 -88.0



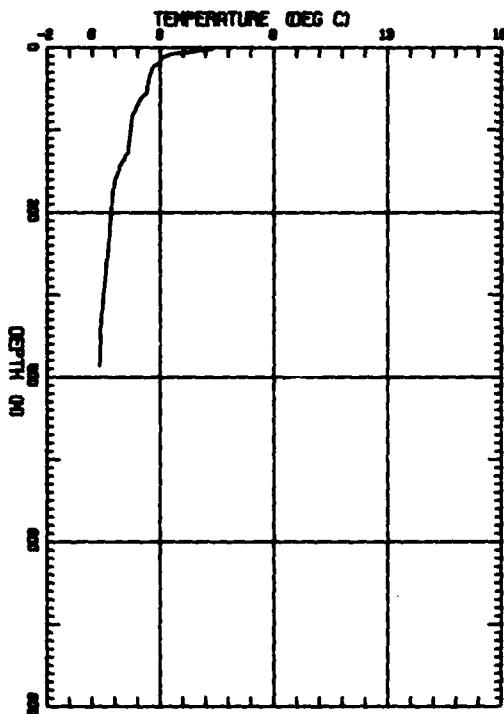
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 888 CHANNEL: 16 LATITUDE: 88 30.0
DATE: 5/28/87 TIME: 12:22:00 LONGITUDE: -7 -81.0



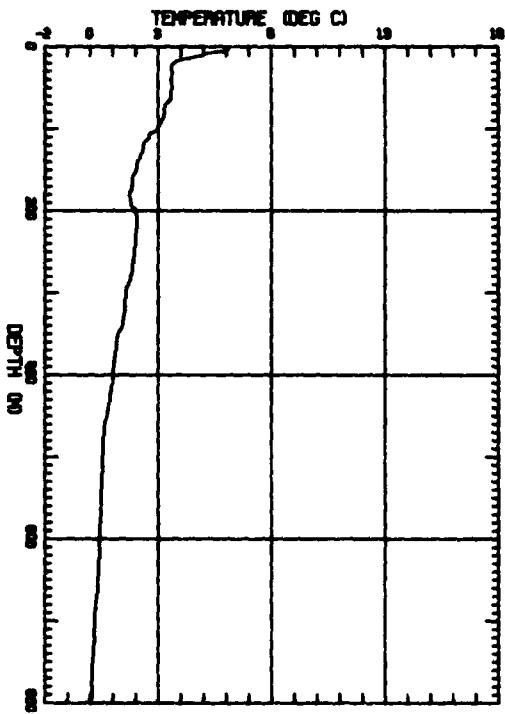
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 806 CHANNEL: 16 LATITUDE: 05 20.2
DATE: 5/28/87 TIME: 12:46:19 LONGITUDE: -7 17.7



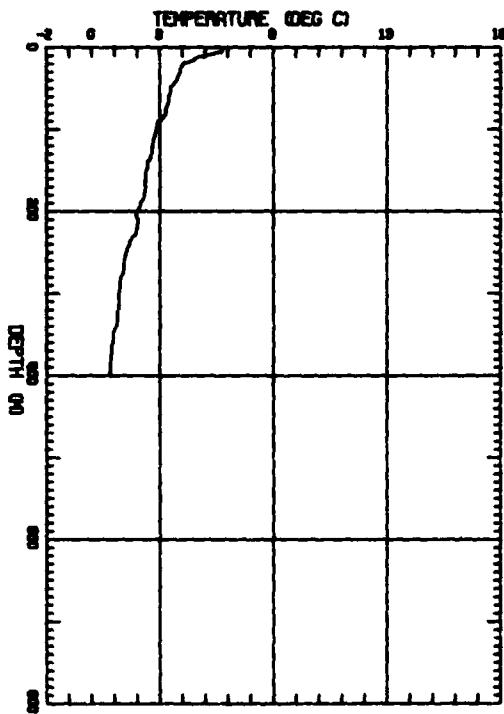
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 806 CHANNEL: 12 LATITUDE: 05 20.0
DATE: 5/28/87 TIME: 12:57:23 LONGITUDE: -6 31.3



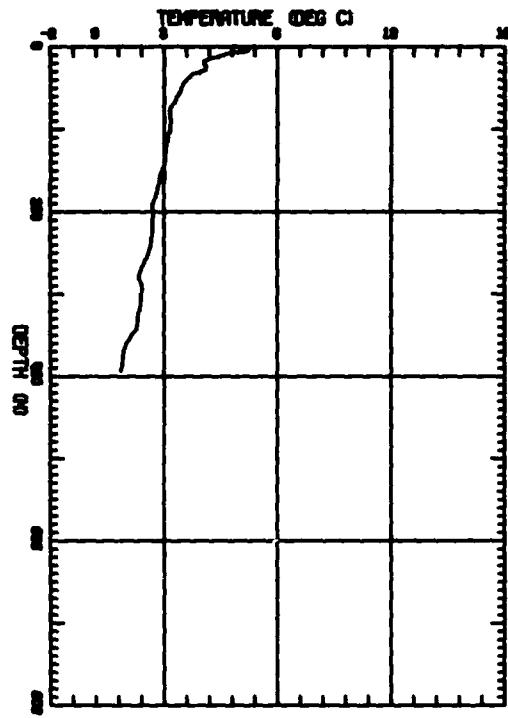
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 807 CHANNEL: 16 LATITUDE: 05 .0
DATE: 5/28/87 TIME: 13 2:21 LONGITUDE: -6 31.0



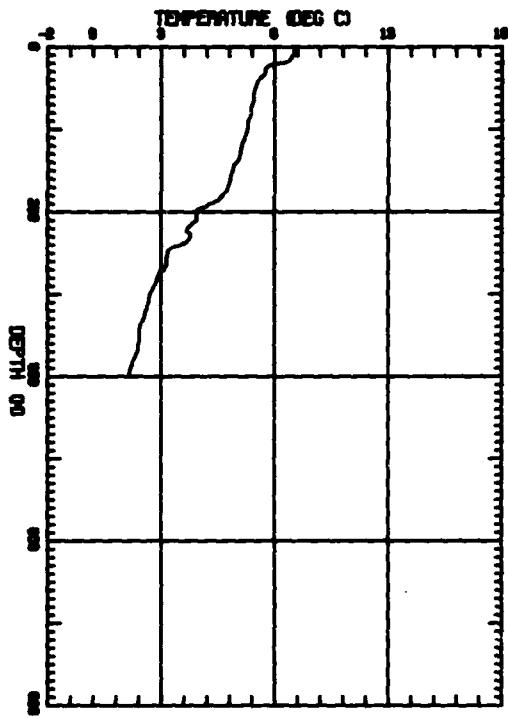
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 808 CHANNEL: 16 LATITUDE: 05 38.8
DATE: 5/28/87 TIME: 13 7:25 LONGITUDE: -6 -32.4



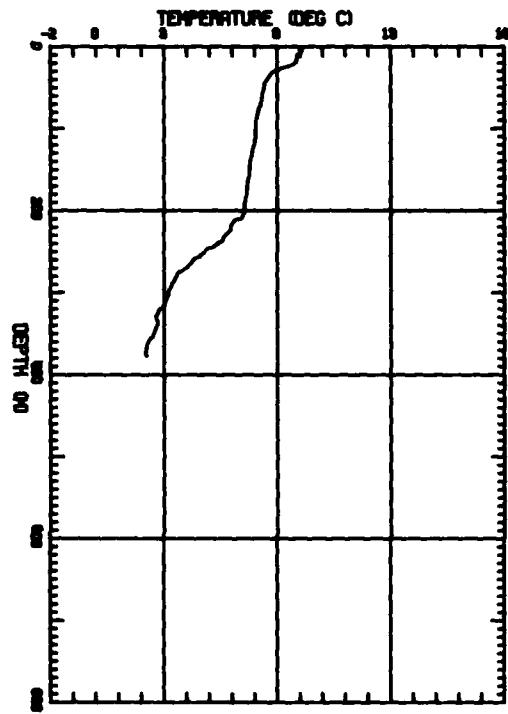
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 510 CHANNEL: 12 LATITUDE: 89 20.1
DATE: 5/28/87 TIME: 19:12:10 LONGITUDE: -63 35.8



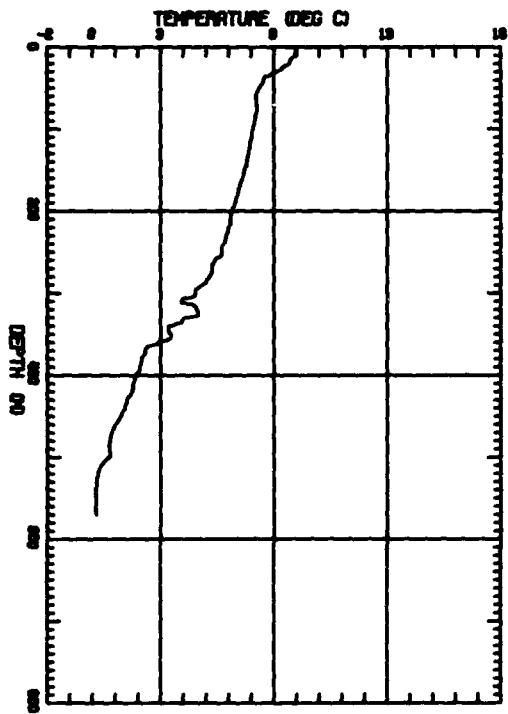
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 510 CHANNEL: 14 LATITUDE: 89 .0
DATE: 5/28/87 TIME: 19:17:17 LONGITUDE: -63 37.2



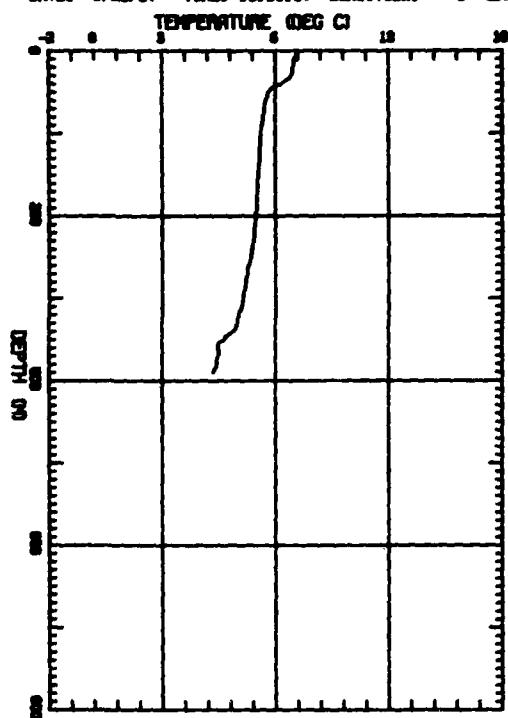
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 511 CHANNEL: 16 LATITUDE: 89 38.3
DATE: 5/28/87 TIME: 19:22:21 LONGITUDE: -63 39.2



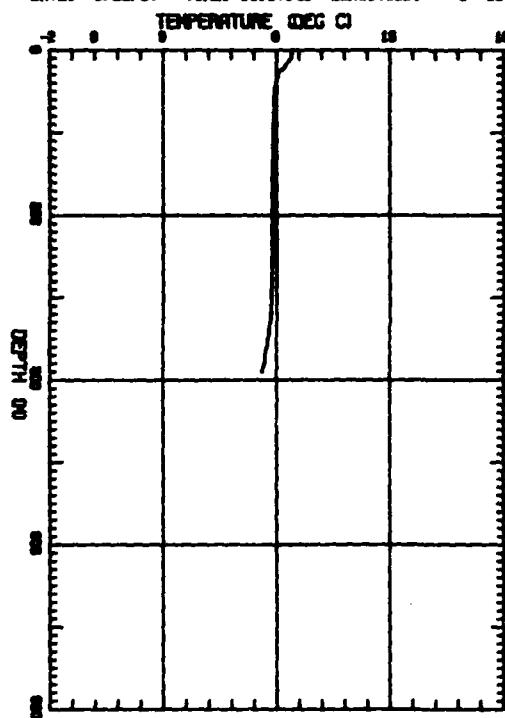
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 512 CHANNEL: 16 LATITUDE: 89 20.0
DATE: 5/28/87 TIME: 19:27:0 LONGITUDE: -63 39.0



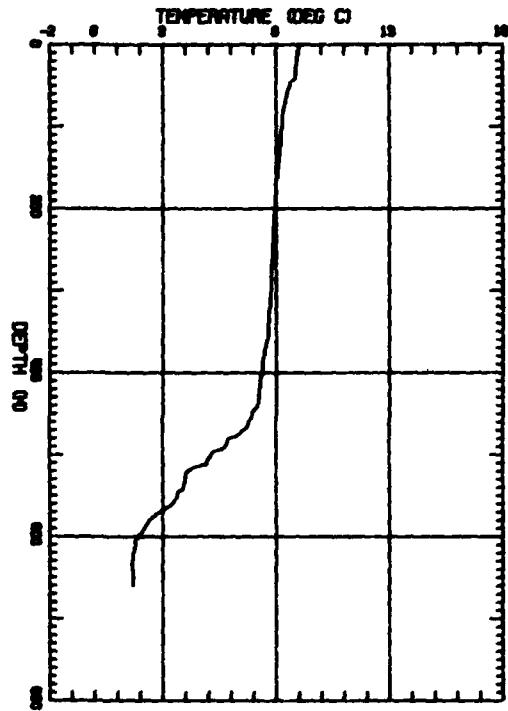
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: S13 CHANNEL: 12 LATITUDE: 82 20.0
DATE: 5/26/87 TIME: 19:31:57 LONGITUDE: -64 42.7



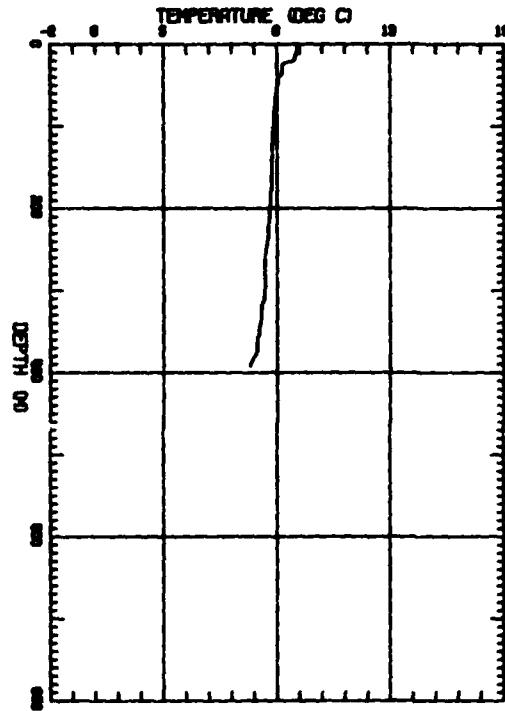
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: S14 CHANNEL: 16 LATITUDE: 82 20.0
DATE: 5/26/87 TIME: 19:37:00 LONGITUDE: -64 42.7



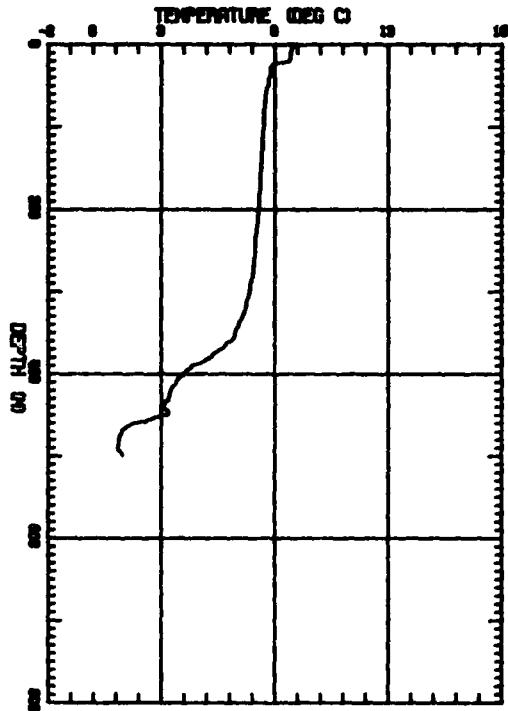
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: S15 CHANNEL: 16 LATITUDE: 82 20.0
DATE: 5/26/87 TIME: 19:43:53 LONGITUDE: -64 41.2



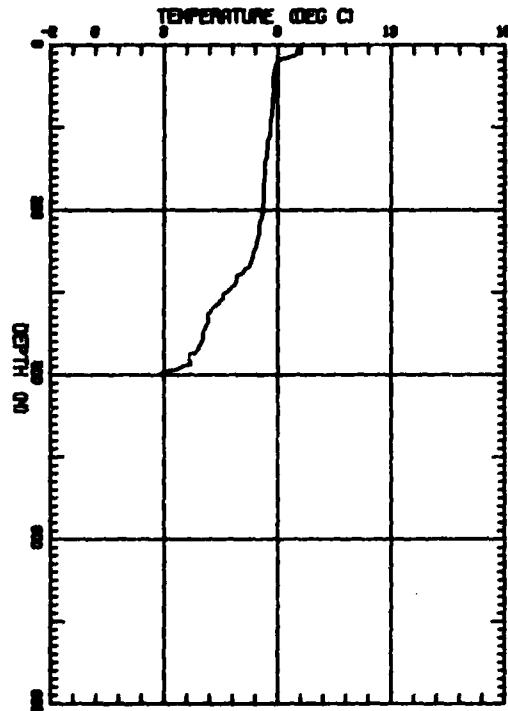
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: S16 CHANNEL: 16 LATITUDE: 82 20.0
DATE: 5/26/87 TIME: 19:50:15 LONGITUDE: -64 40.7



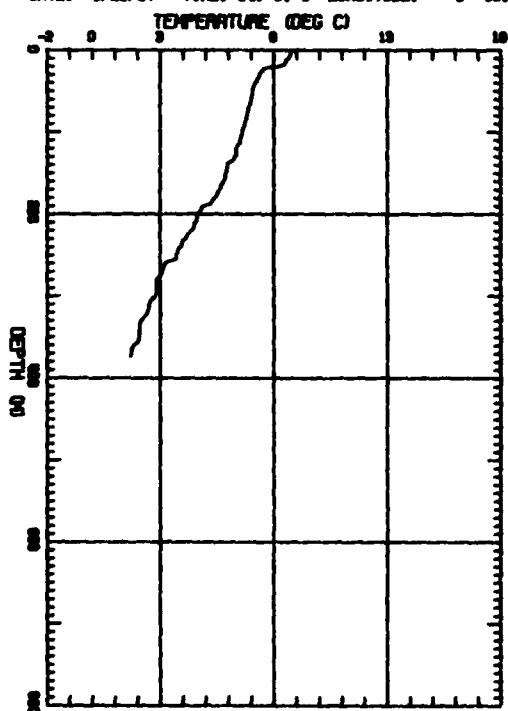
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 517 CHANNEL: 16 LATITUDE: 88 .0
DATE: 5/28/87 TIME: 18:06:11 LONGITUDE: -9 -47.0



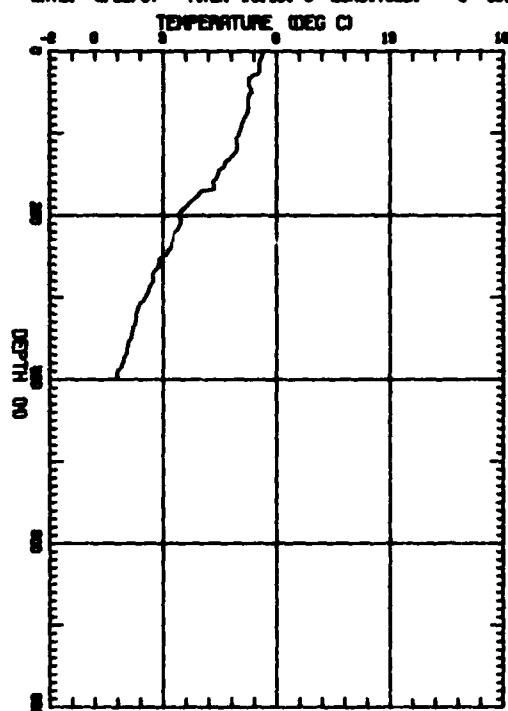
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 518 CHANNEL: 26 LATITUDE: 88 20.0
DATE: 5/28/87 TIME: 18: 0: 5 LONGITUDE: -9 -47.0



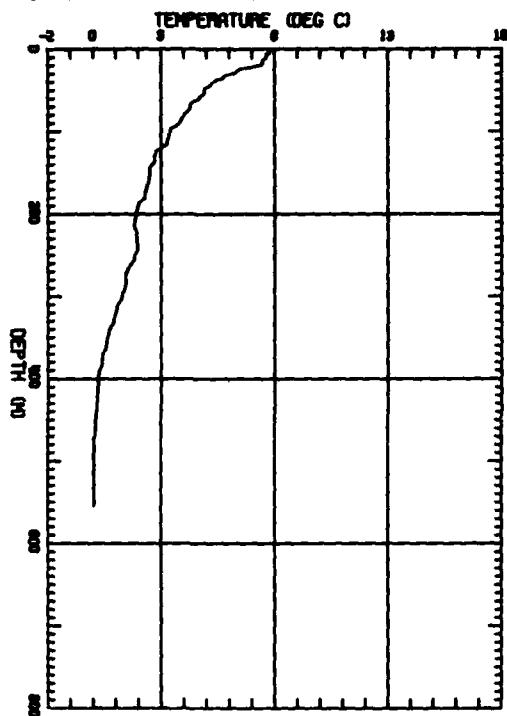
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 519 CHANNEL: 16 LATITUDE: 88 80.0
DATE: 5/28/87 TIME: 18: 5: 5 LONGITUDE: -9 -48.7



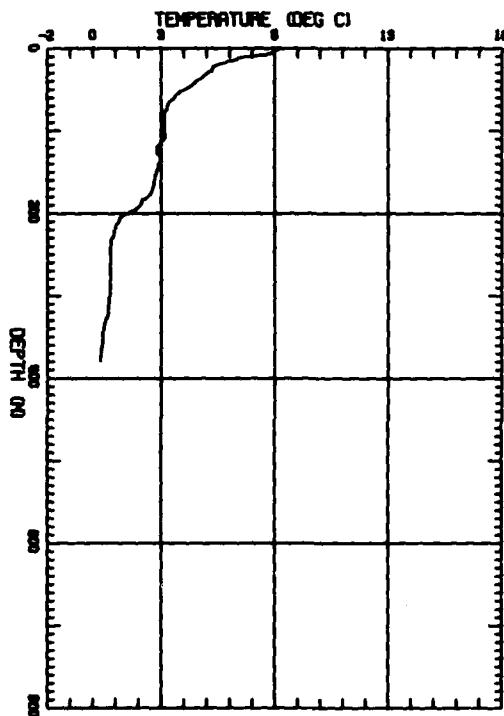
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 520 CHANNEL: 12 LATITUDE: 88 .0
DATE: 5/28/87 TIME: 18:10: 6 LONGITUDE: -9 -48.6



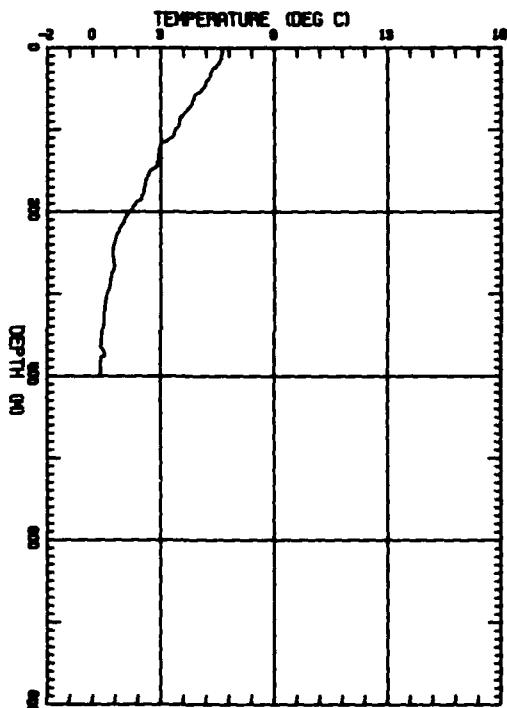
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 521 CHANNEL: 16 LATITUDE: 06 20.1
DATE: 5/26/87 TIME: 14:15:24 LONGITUDE: -9 46.1



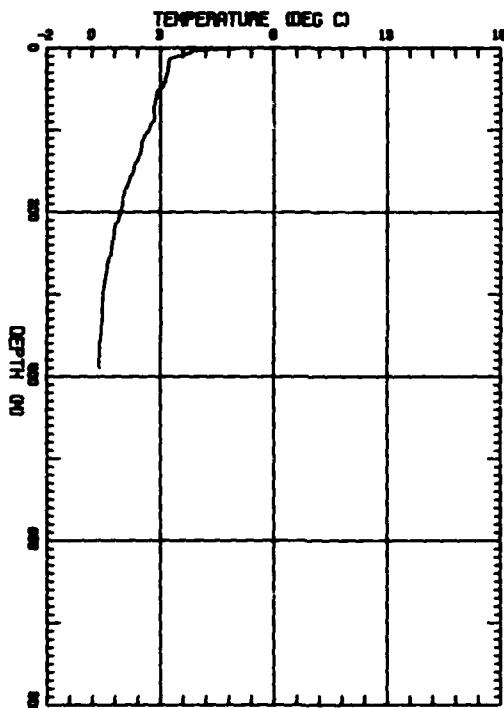
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 522 CHANNEL: 16 LATITUDE: 06 50.0
DATE: 5/26/87 TIME: 14:20:35 LONGITUDE: -9 42.2



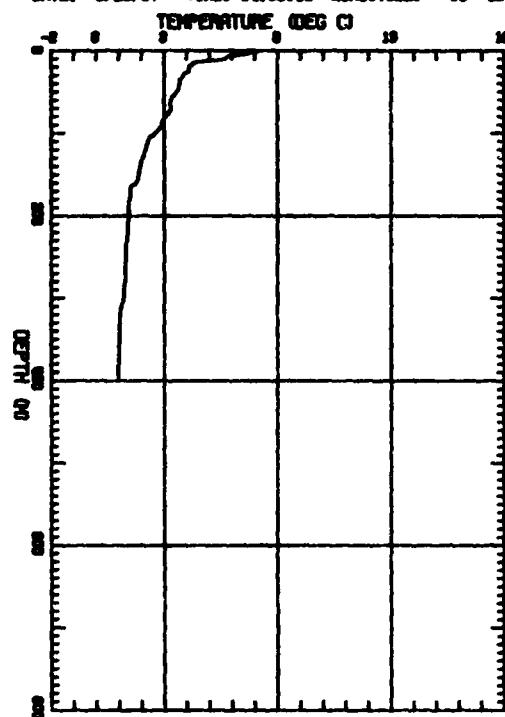
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 523 CHANNEL: 12 LATITUDE: 06 .9
DATE: 5/26/87 TIME: 14:25:30 LONGITUDE: -9 39.7



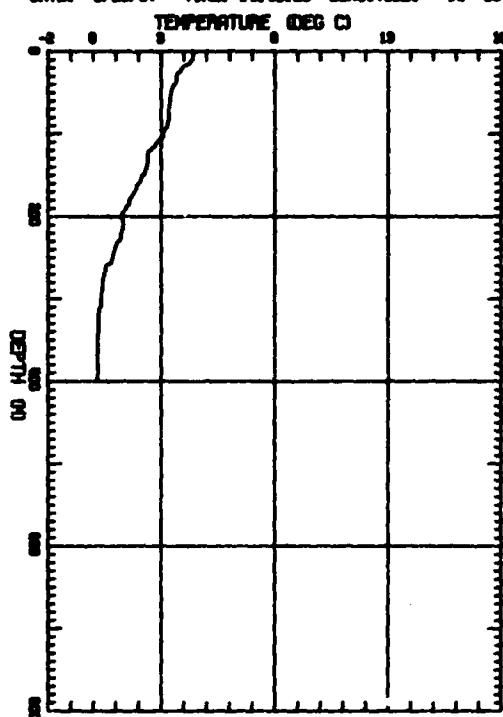
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 524 CHANNEL: 16 LATITUDE: 06 21.5
DATE: 5/26/87 TIME: 14:30:40 LONGITUDE: -9 37.6



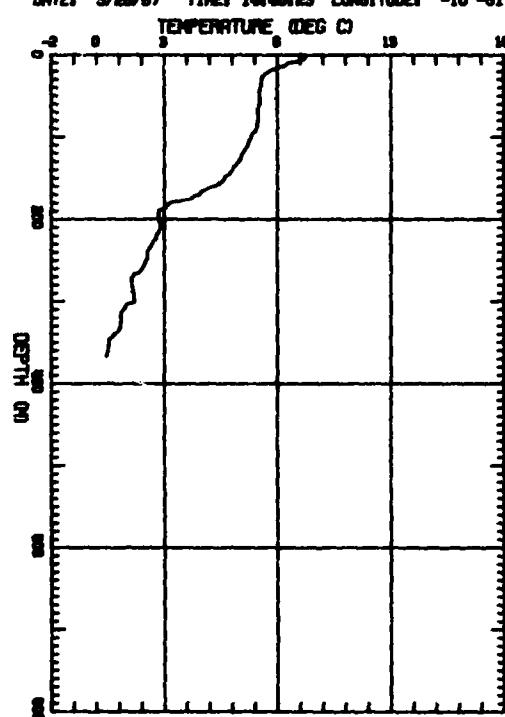
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 526 CHANNEL: 16 LATITUDE: 06 18.6
DATE: 5/28/07 TIME: 14:59:35 LONGITUDE: -10 50.2



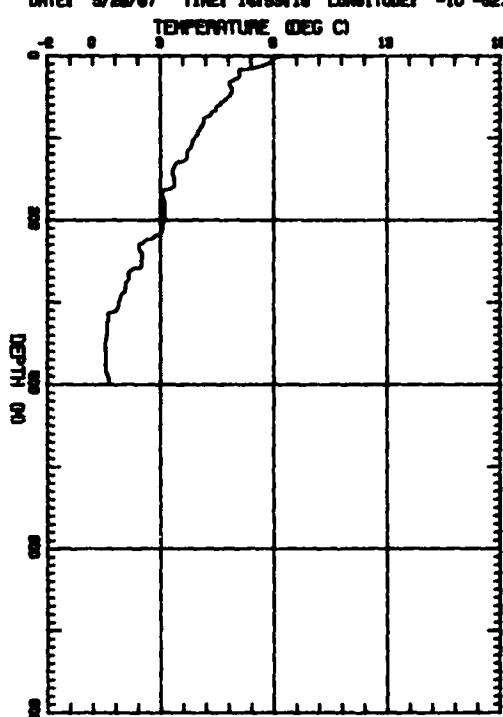
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 526 CHANNEL: 12 LATITUDE: 06 18.0
DATE: 5/28/07 TIME: 14:59:25 LONGITUDE: -10 50.1



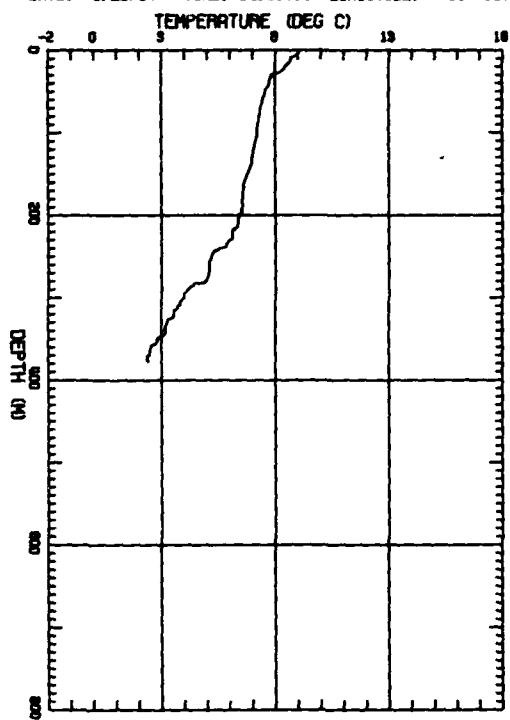
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 527 CHANNEL: 16 LATITUDE: 06 38.6
DATE: 5/28/07 TIME: 14:49:23 LONGITUDE: -10 51.8



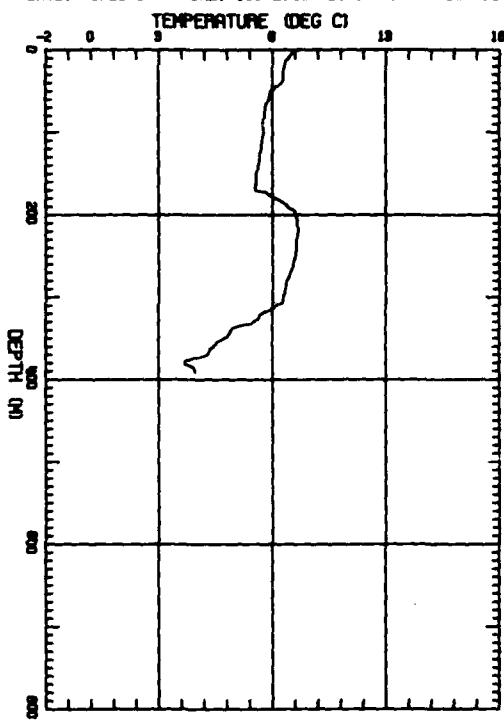
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 526 CHANNEL: 16 LATITUDE: 06 20.1
DATE: 5/28/07 TIME: 14:59:10 LONGITUDE: -10 52.8



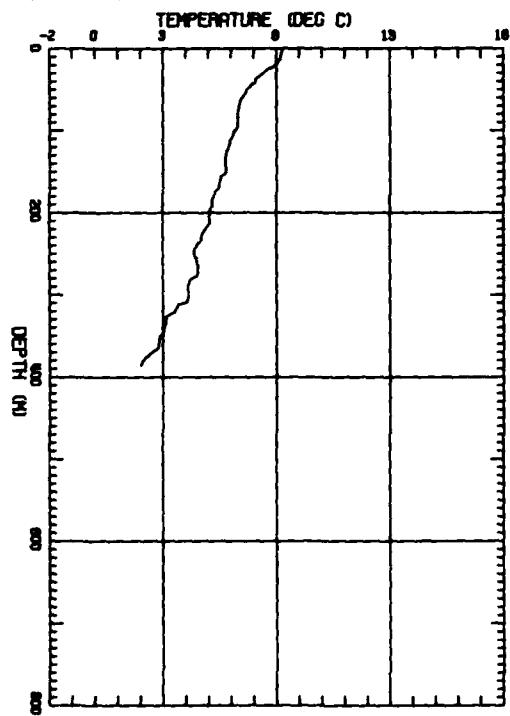
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 528 CHANNEL: 14 LATITUDE: 64 .0
DATE: 5/28/87 TIME: 14:56:10 LONGITUDE: -10 -59.4



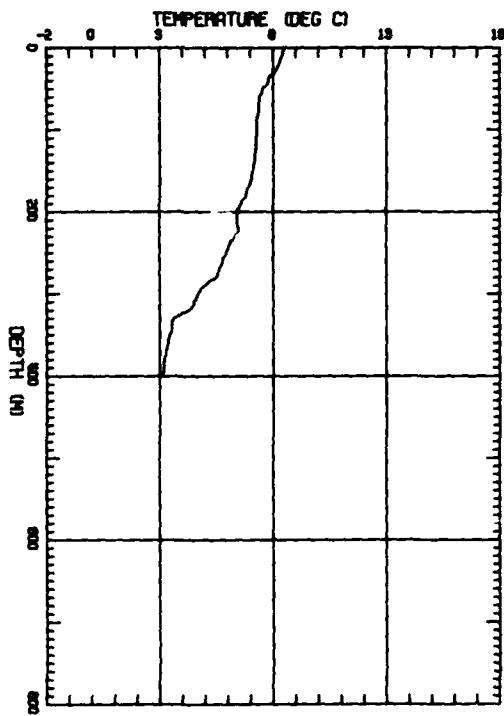
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 530 CHANNEL: 12 LATITUDE: 63 40.2
DATE: 5/28/87 TIME: 15: 2:15 LONGITUDE: -10 -52.5



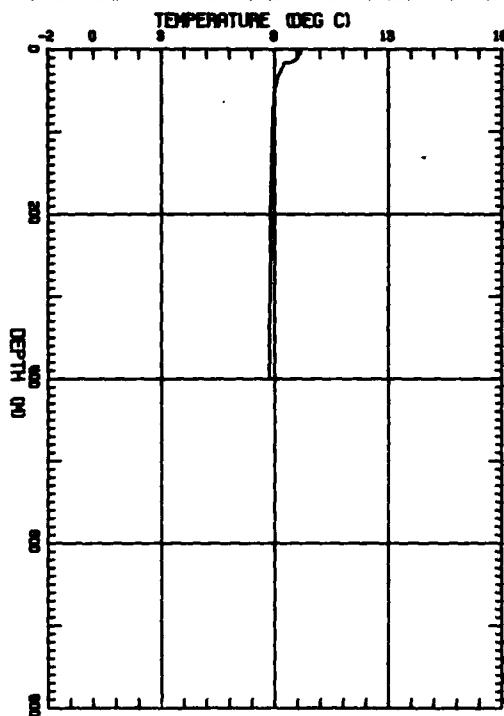
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 531 CHANNEL: 16 LATITUDE: 63 20.0
DATE: 5/28/87 TIME: 15: 8: 1 LONGITUDE: -10 -52.9



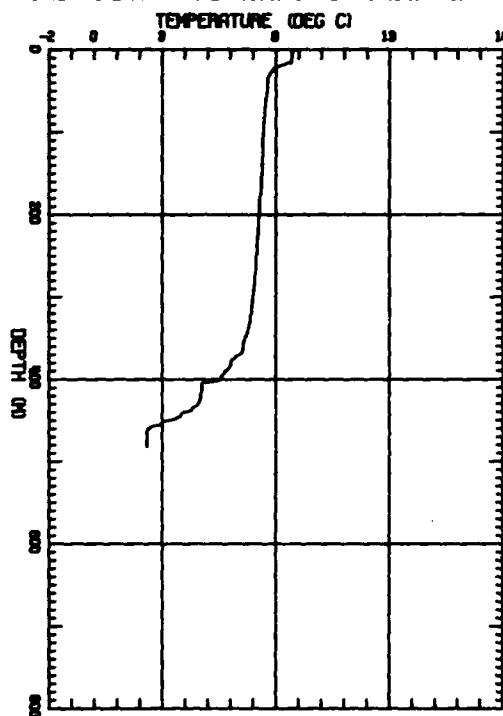
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 532 CHANNEL: 14 LATITUDE: 63 .0
DATE: 5/28/87 TIME: 15:19: 7 LONGITUDE: -10 -53.6



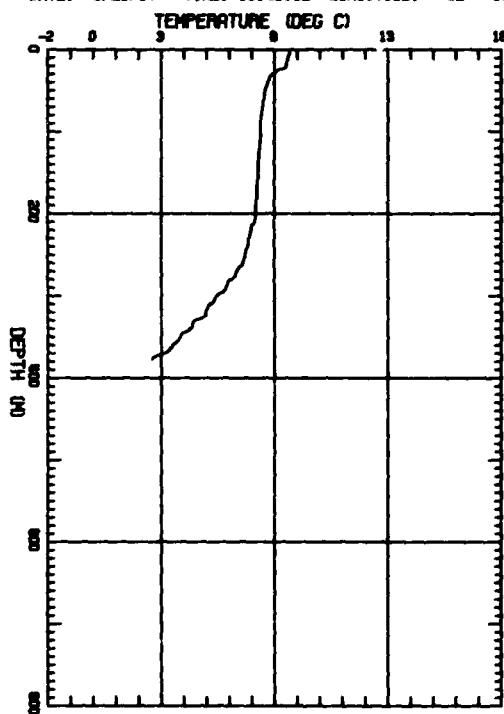
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 534 CHANNEL: 16 LATITUDE: 62 19.8
DATE: 5/26/87 TIME: 15:22:57 LONGITUDE: -10 -52.5



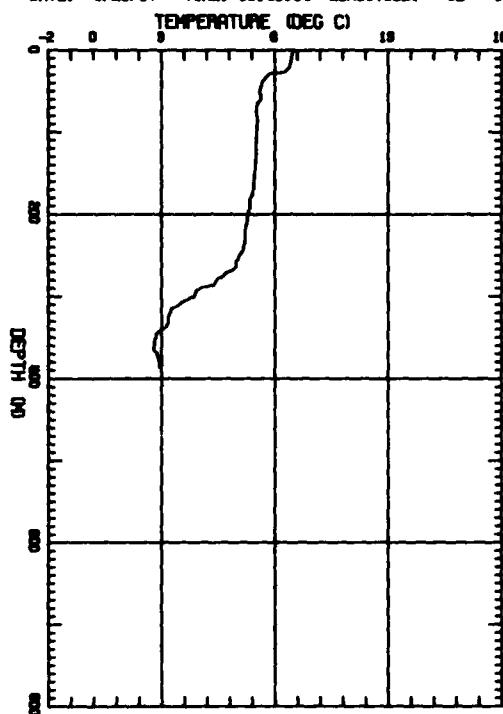
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 537 CHANNEL: 16 LATITUDE: 63 .0
DATE: 5/26/87 TIME: 15:39:57 LONGITUDE: -12 -3.7



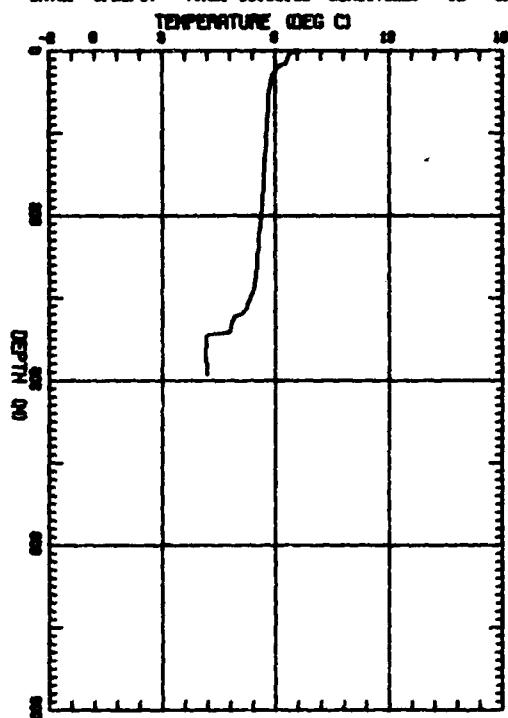
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 538 CHANNEL: 12 LATITUDE: 63 20.0
DATE: 5/26/87 TIME: 15:45:52 LONGITUDE: -12 -3.1



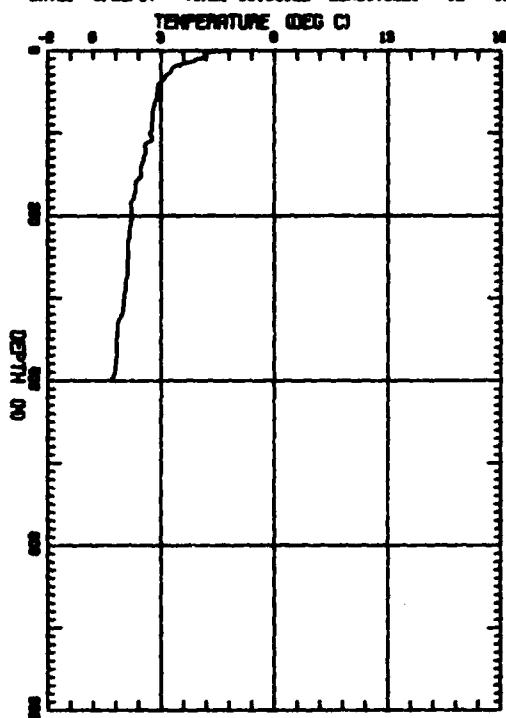
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 539 CHANNEL: 14 LATITUDE: 63 44.1
DATE: 5/26/87 TIME: 15:40:54 LONGITUDE: -12 -4.2



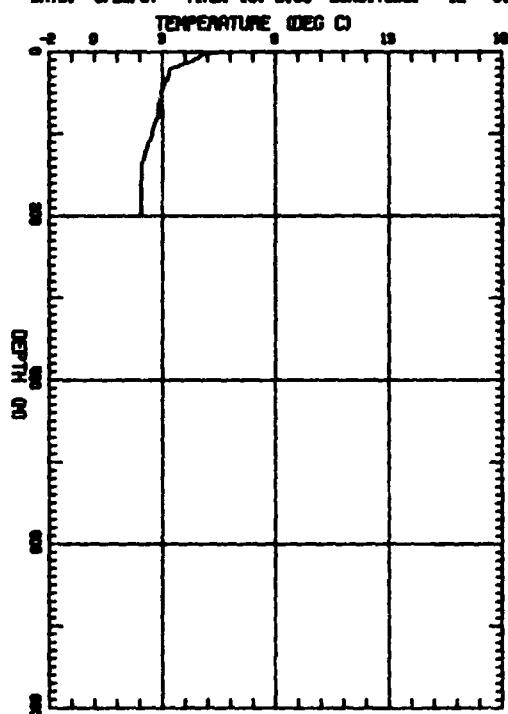
PROJECT: TACTICAL SCENICGRAPHY
DROP NO: 580 CHANNEL: 12 LATITUDE: 06 00.0
DATE: 5/26/87 TIME: 15:00:30 LONGITUDE: -12 42.4



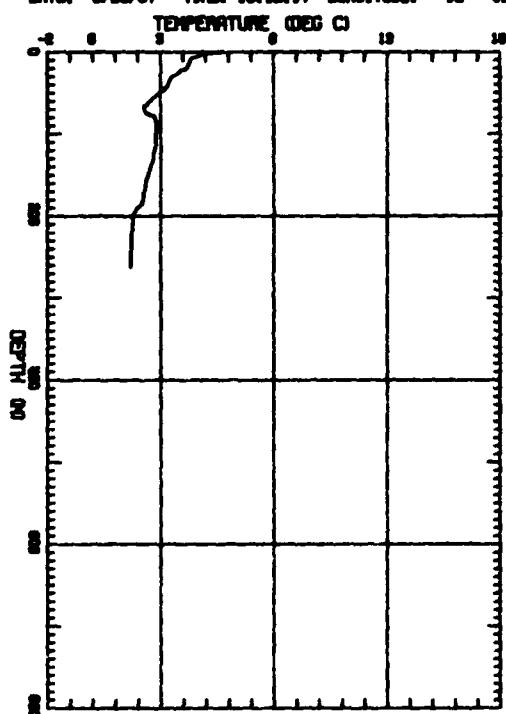
PROJECT: TACTICAL SCENICGRAPHY
DROP NO: 581 CHANNEL: 14 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 15:00:22 LONGITUDE: -12 46.6



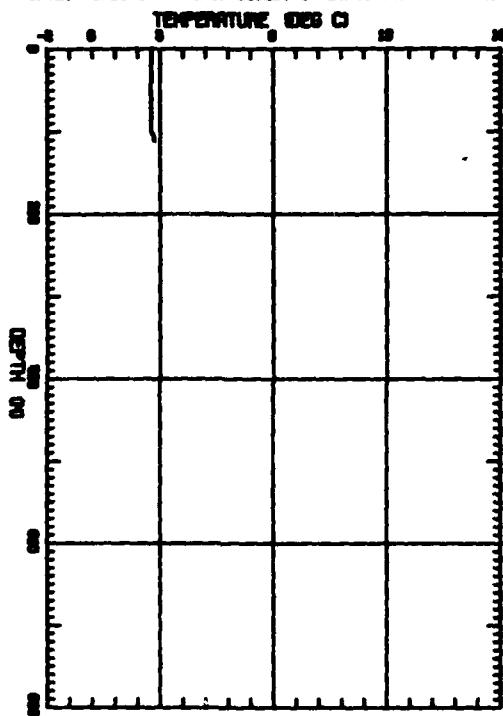
PROJECT: TACTICAL SCENICGRAPHY
DROP NO: 582 CHANNEL: 16 LATITUDE: 06 00.3
DATE: 5/26/87 TIME: 16:2:30 LONGITUDE: -12 46.7



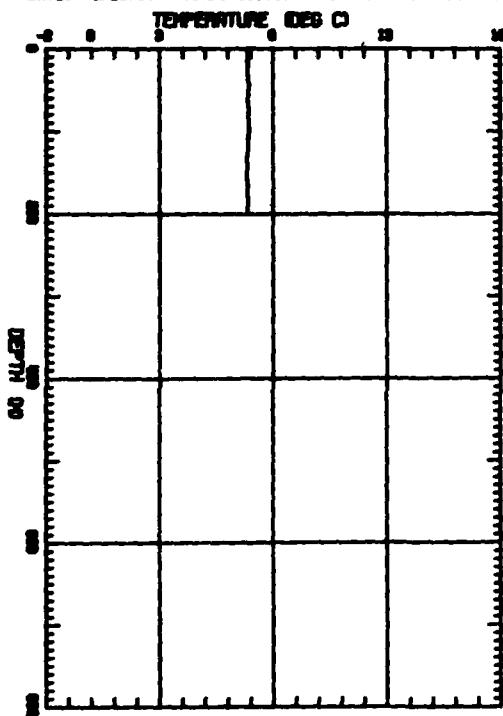
PROJECT: TACTICAL SCENICGRAPHY
DROP NO: 583 CHANNEL: 18 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 16:12:17 LONGITUDE: -12 46.1



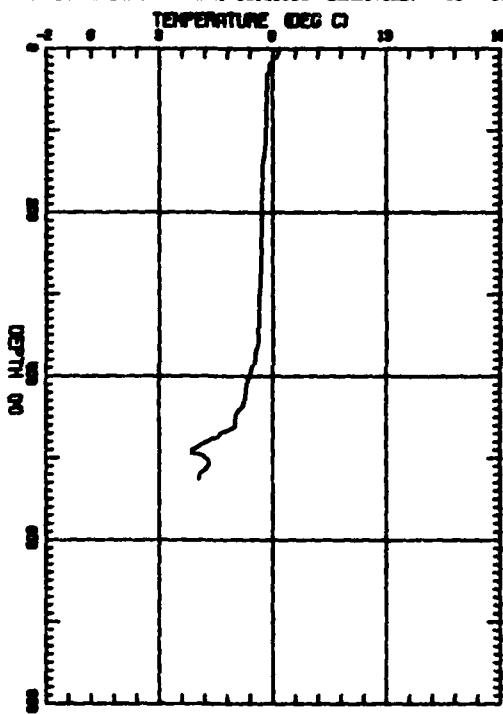
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 500 CHANNEL: 12 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 10:20:3 LONGITUDE: -13 22.3



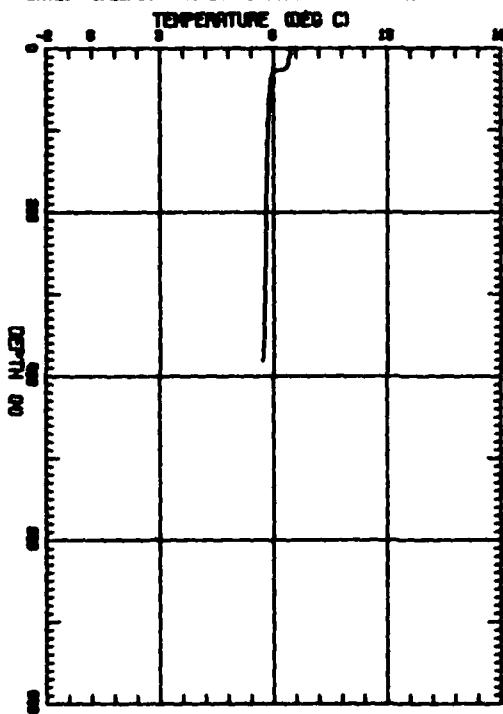
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 500 CHANNEL: 14 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 10:31:6 LONGITUDE: -13 22.3



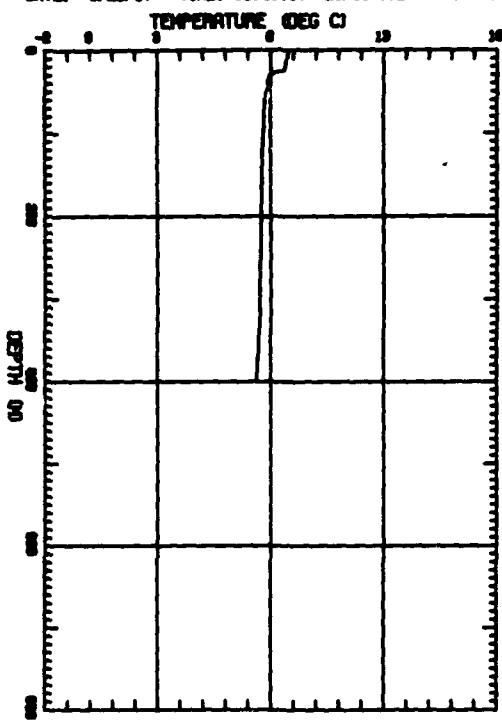
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 507 CHANNEL: 16 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 10:45:00 LONGITUDE: -13 22.3



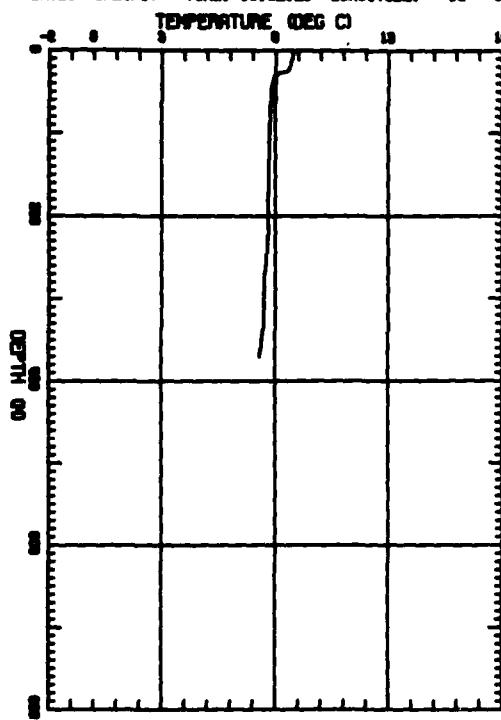
PROJECT: TACTICAL SEISMOMETRY
DROP NO: 500 CHANNEL: 12 LATITUDE: 06 20.0
DATE: 5/26/87 TIME: 10:49:27 LONGITUDE: -13 22.3



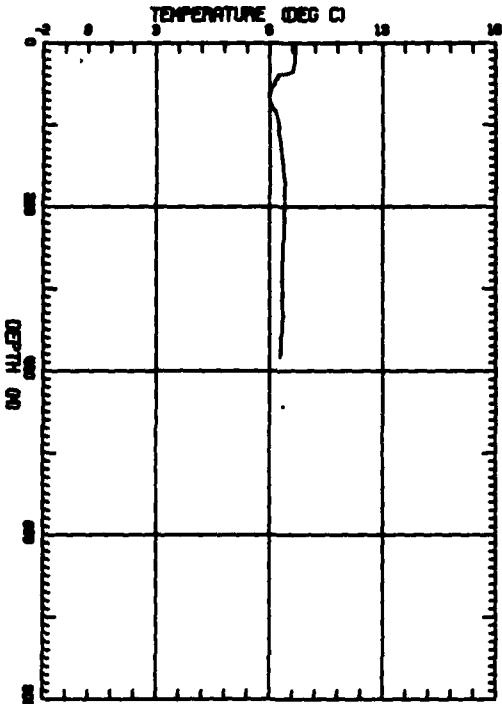
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 500 CHANNEL: 16 LATITUDE: 80 20.0
DATE: 5/26/87 TIME: 16:45:57 LONGITUDE: -19 -8.5



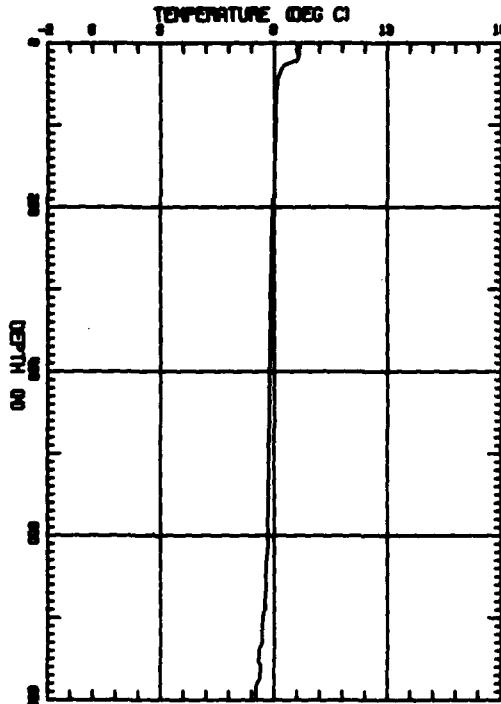
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 501 CHANNEL: 12 LATITUDE: 80 .0
DATE: 5/26/87 TIME: 16:52:25 LONGITUDE: -19 -3.2



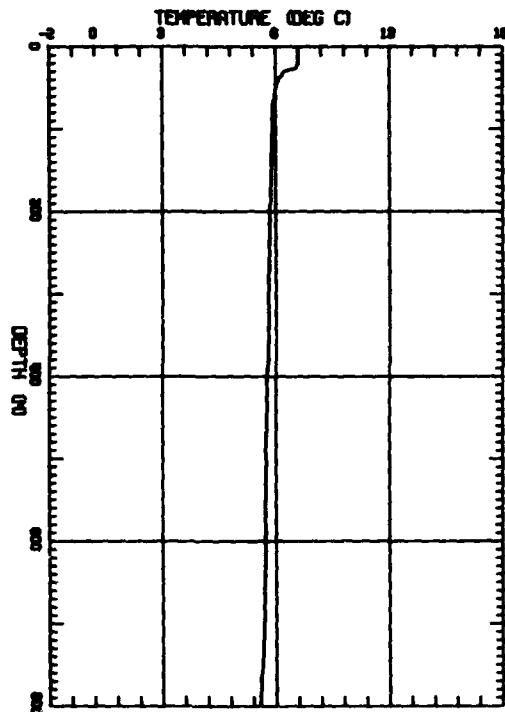
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 502 CHANNEL: 12 LATITUDE: 82 40.0
DATE: 5/26/87 TIME: 16:55:22 LONGITUDE: -19 -2.5



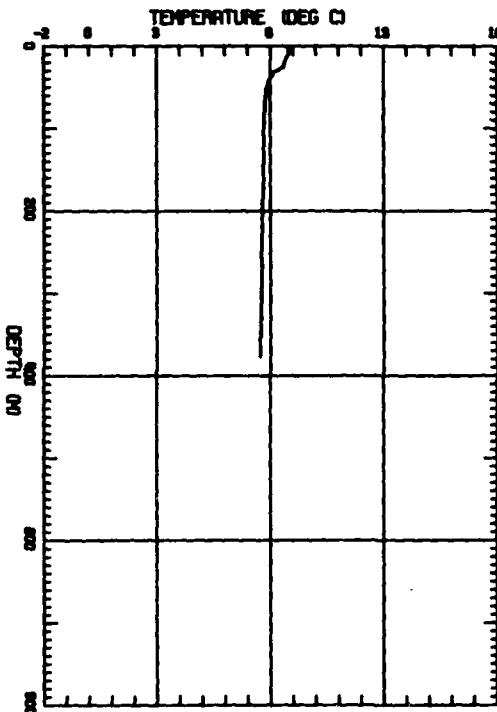
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 503 CHANNEL: 14 LATITUDE: 82 20.0
DATE: 5/26/87 TIME: 17:0:20 LONGITUDE: -19 -3.0



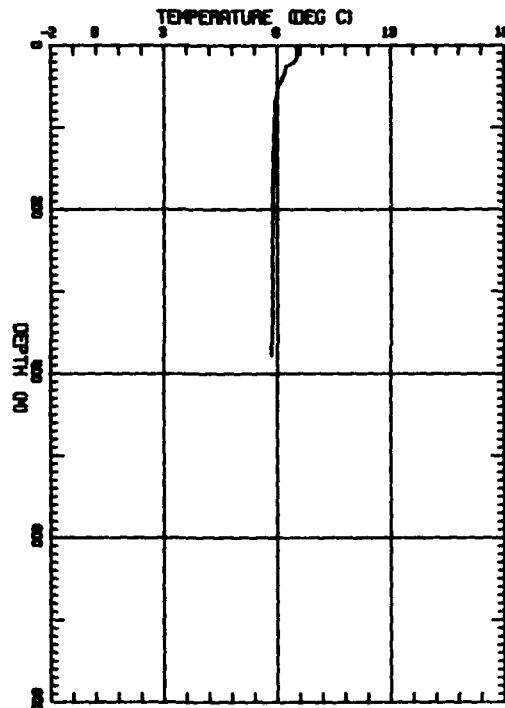
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 16 LATITUDE: 62 20.0
DATE: 5/26/87 TIME: 17:02:28 LONGITUDE: -14 -13.6



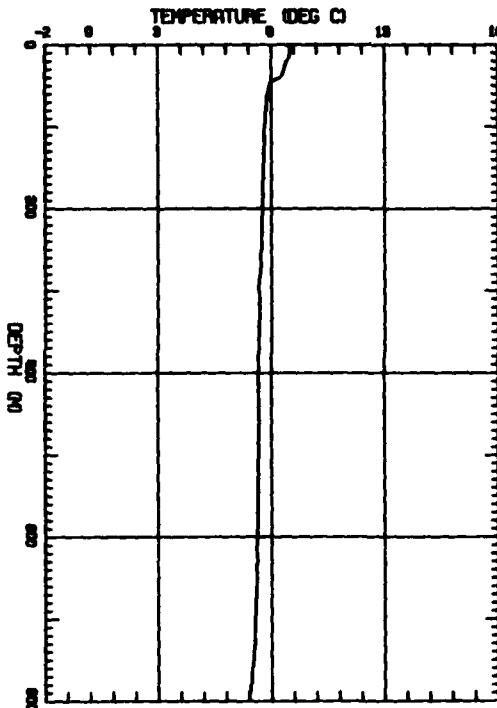
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 12 LATITUDE: 62 40.0
DATE: 5/26/87 TIME: 17:12:51 LONGITUDE: -14 -13.5



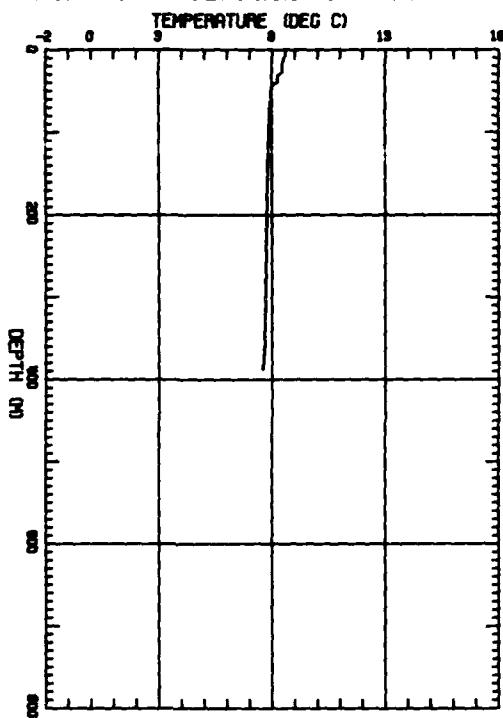
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 16 LATITUDE: 63 .0
DATE: 5/26/87 TIME: 17:17:10 LONGITUDE: -14 -15.0



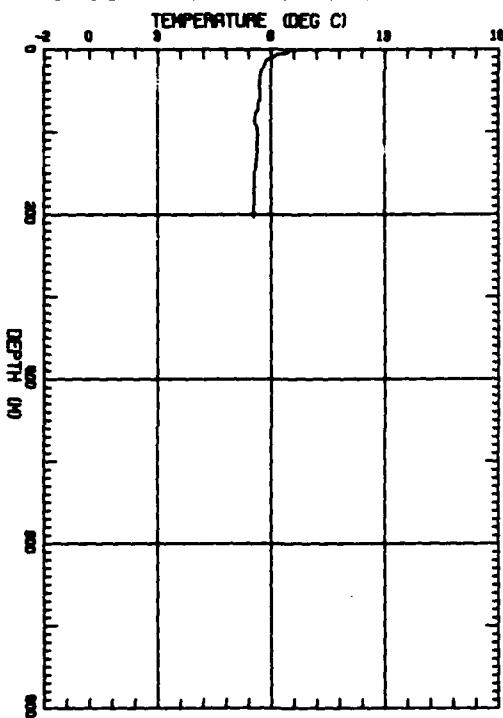
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 587 CHANNEL: 16 LATITUDE: 63 20.0
DATE: 5/26/87 TIME: 17:21:31 LONGITUDE: -14 -17.0



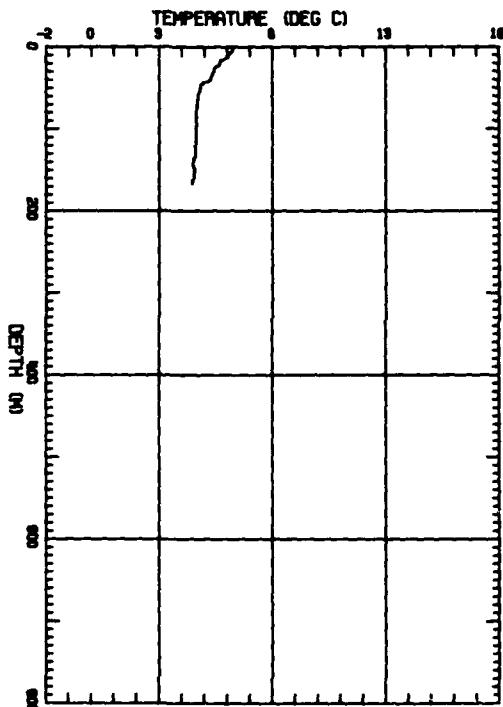
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 560 CHANNEL: 12 LATITUDE: 69 40.1
DATE: 5/28/87 TIME: 17:25:58 LONGITUDE: -14 16.4



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 560 CHANNEL: 16 LATITUDE: 69 40.0
DATE: 5/28/87 TIME: 17:30:17 LONGITUDE: -14 20.6

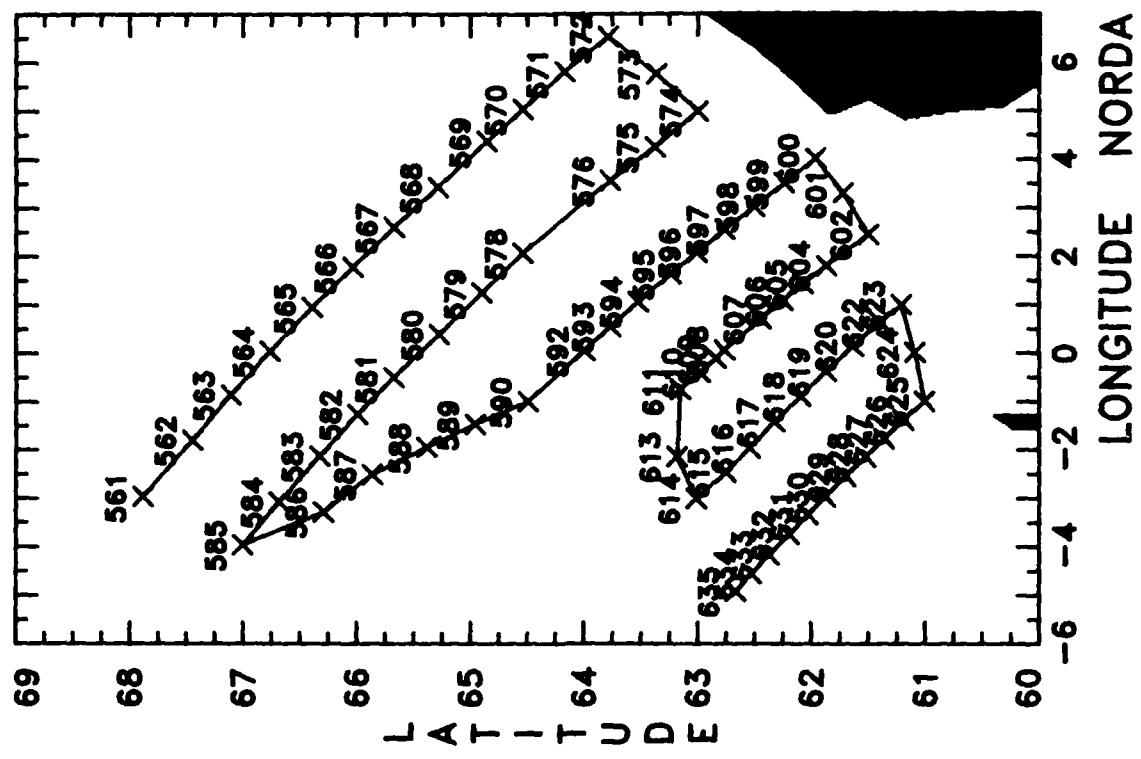


PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 560 CHANNEL: 18 LATITUDE: 69 20.0
DATE: 5/28/87 TIME: 17:38:0 LONGITUDE: -13 48.0

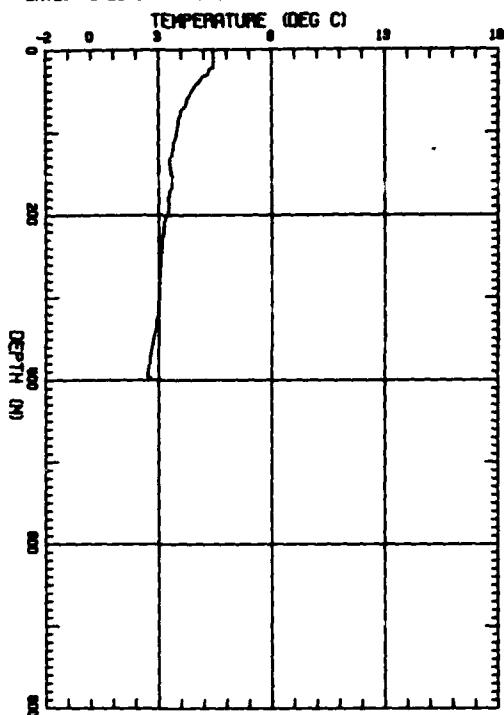


**Appendix G.
Drop Positions and Data Profiles, Flight 7,
28 May 1987, Southern Norwegian Sea.**

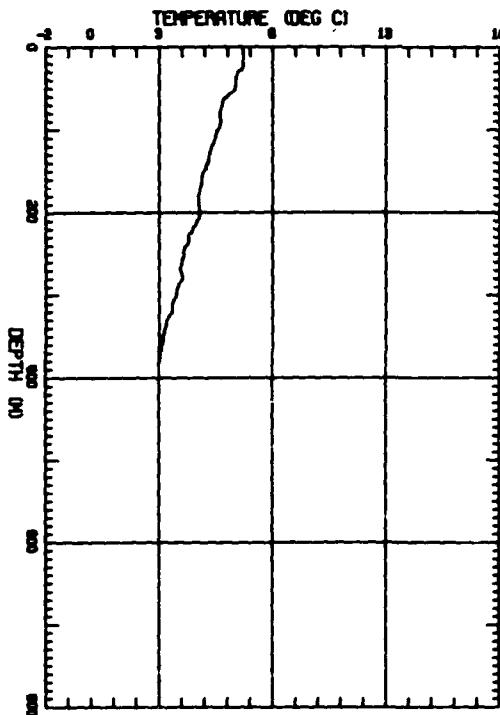
70 AXBTs 28 May 1987



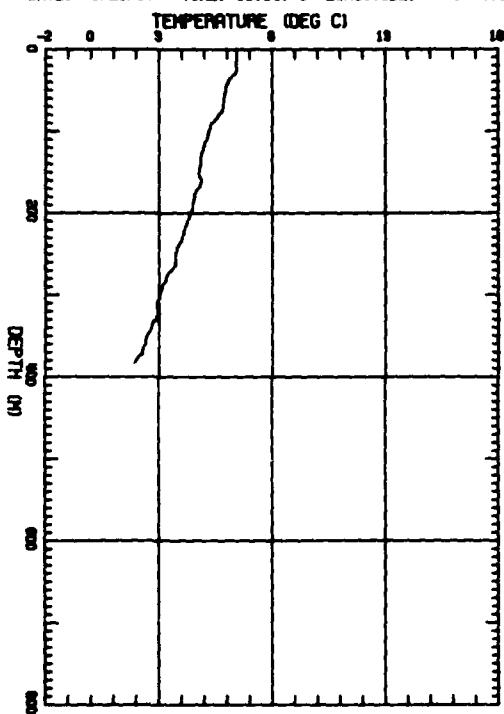
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 581 CHANNEL: 12 LATITUDE: 67 53.1
DATE: 5/28/87 TIME: 10:37:55 LONGITUDE: -2 57.5



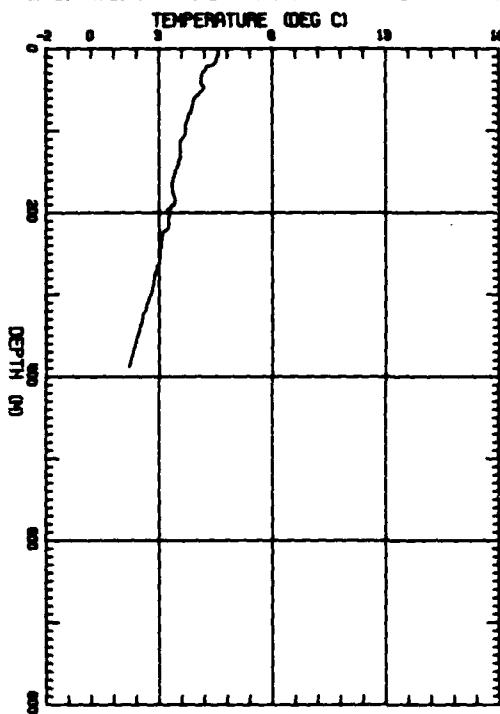
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 582 CHANNEL: 14 LATITUDE: 67 28.8
DATE: 5/28/87 TIME: 10:46:16 LONGITUDE: -1 47.9



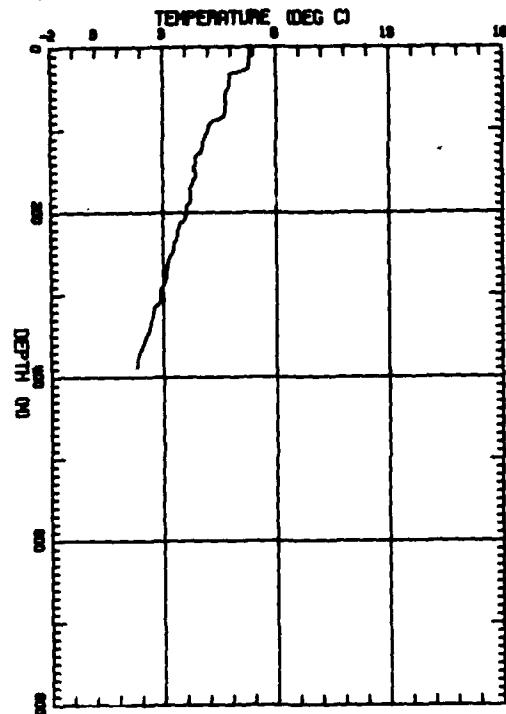
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 583 CHANNEL: 16 LATITUDE: 67 6.4
DATE: 5/28/87 TIME: 10:53:09 LONGITUDE: 0 51.9



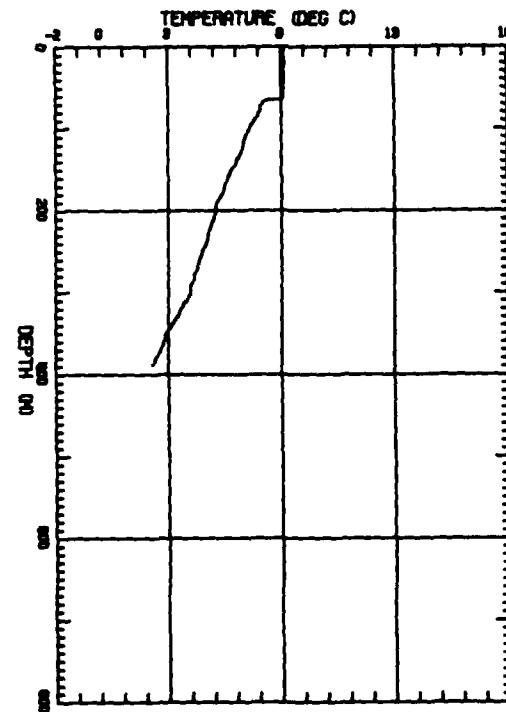
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 584 CHANNEL: 12 LATITUDE: 68 45.9
DATE: 5/28/87 TIME: 11:03:30 LONGITUDE: 0 2.6



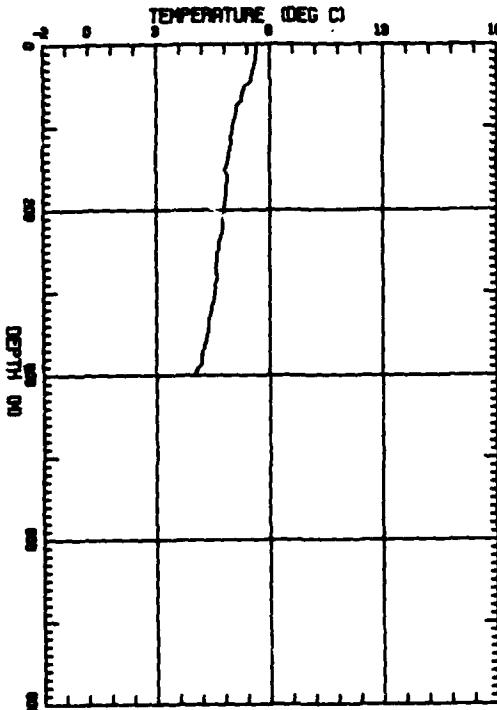
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 986 CHANNEL: 16 LATITUDE: 06 23.2
DATE: 5/28/87 TIME: 11: 7:29 LONGITUDE: -9 57.1



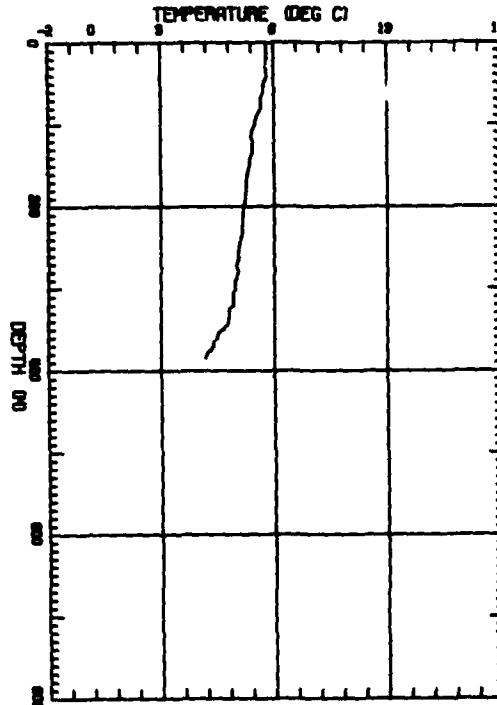
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 987 CHANNEL: 12 LATITUDE: 06 40.1
DATE: 5/28/87 TIME: 11:21: 9 LONGITUDE: -9 38.6



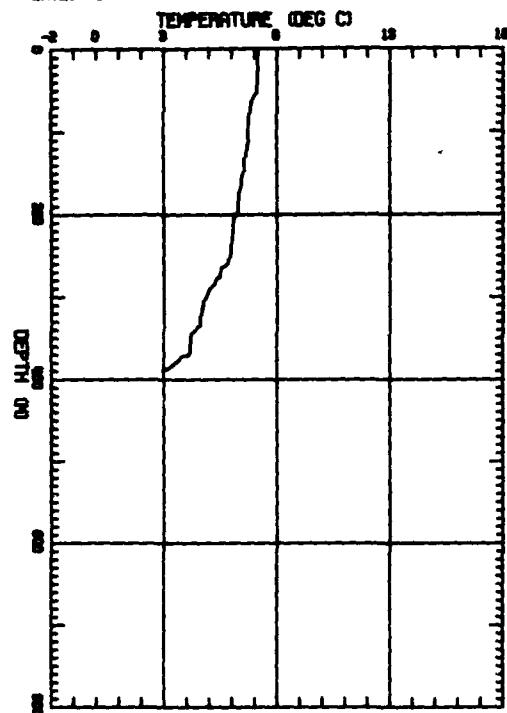
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 988 CHANNEL: 16 LATITUDE: 06 16.8
DATE: 5/28/87 TIME: 11:14: 7 LONGITUDE: -9 46.9



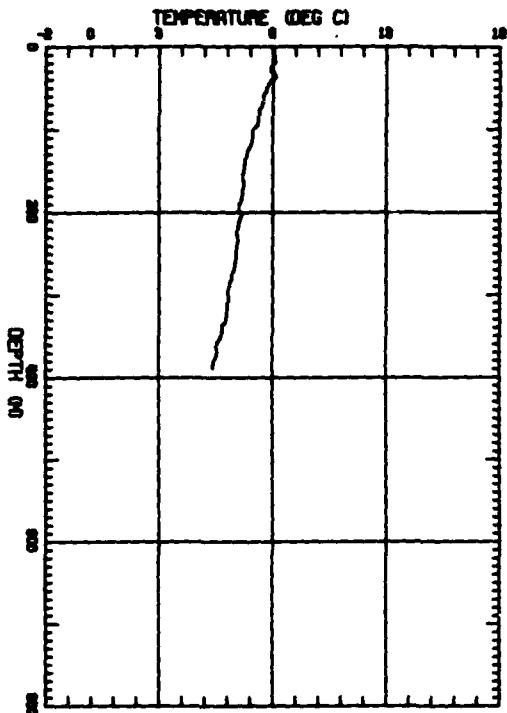
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 988 CHANNEL: 16 LATITUDE: 06 16.8
DATE: 5/28/87 TIME: 11:28:25 LONGITUDE: -9 46.9



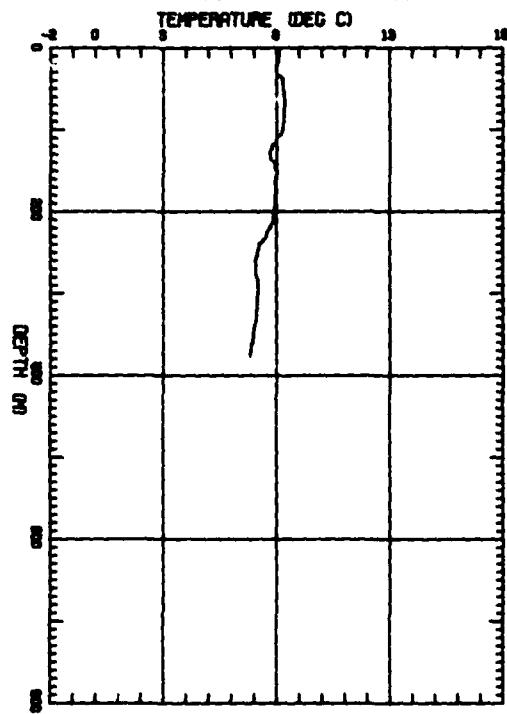
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 568 CHANNEL: 10 LATITUDE: 61 51.0
DATE: 5/26/87 TIME: 11:36:43 LONGITUDE: -4 23.0



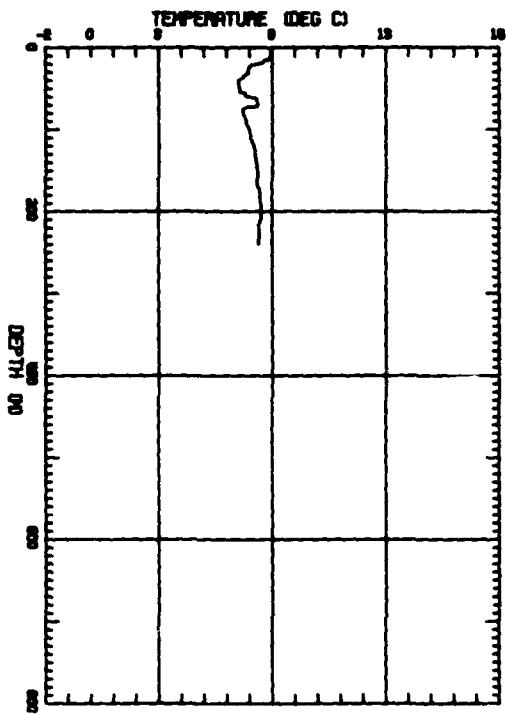
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 570 CHANNEL: 12 LATITUDE: 61 32.0
DATE: 5/26/87 TIME: 11:42:38 LONGITUDE: -5 2.7



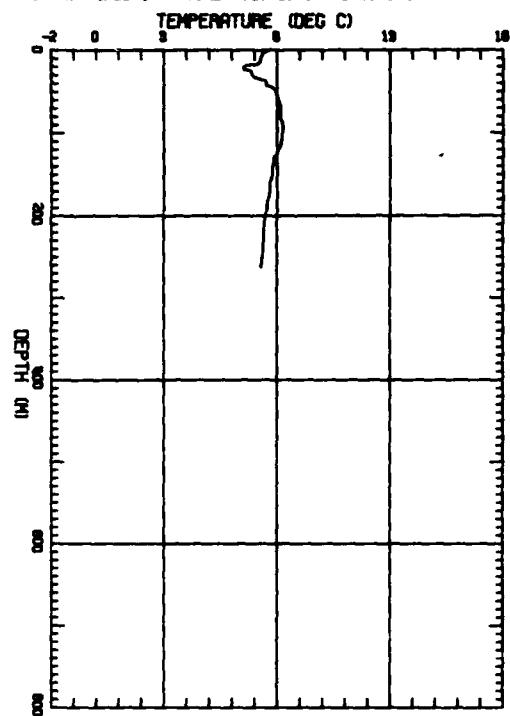
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 571 CHANNEL: 16 LATITUDE: 61 10.0
DATE: 5/26/87 TIME: 11:48:31 LONGITUDE: -5 48.0



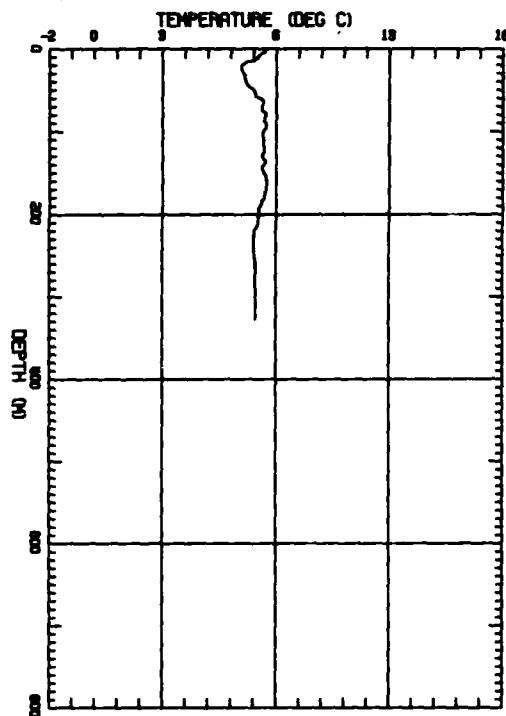
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 572 CHANNEL: 18 LATITUDE: 61 47.2
DATE: 5/26/87 TIME: 11:58:21 LONGITUDE: -5 32.1



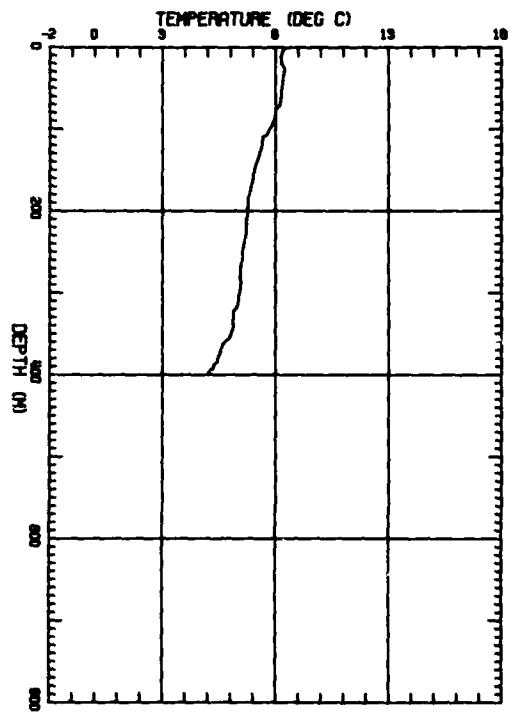
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 573 CHANNEL: 12 LATITUDE: 69 21.7
DATE: 5/28/67 TIME: 12:31.6 LONGITUDE: 5 48.0



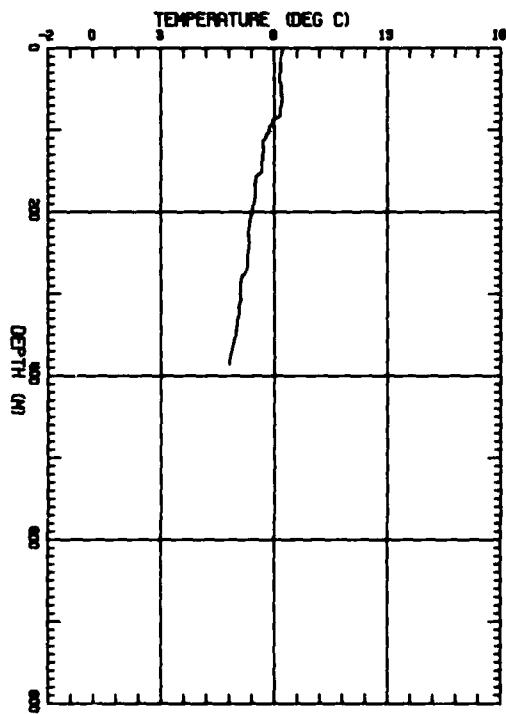
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 574 CHANNEL: 14 LATITUDE: 62 58.6
DATE: 5/28/67 TIME: 12:10.9 LONGITUDE: 4 59.6



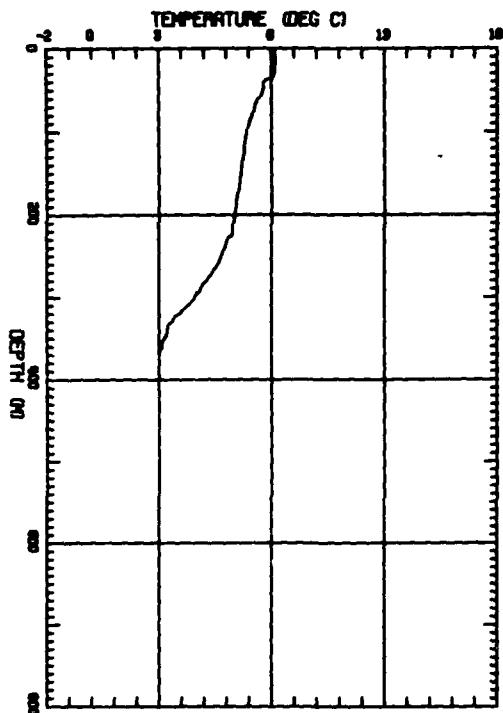
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 575 CHANNEL: 18 LATITUDE: 69 22.9
DATE: 5/28/67 TIME: 12:15.50 LONGITUDE: 4 15.5



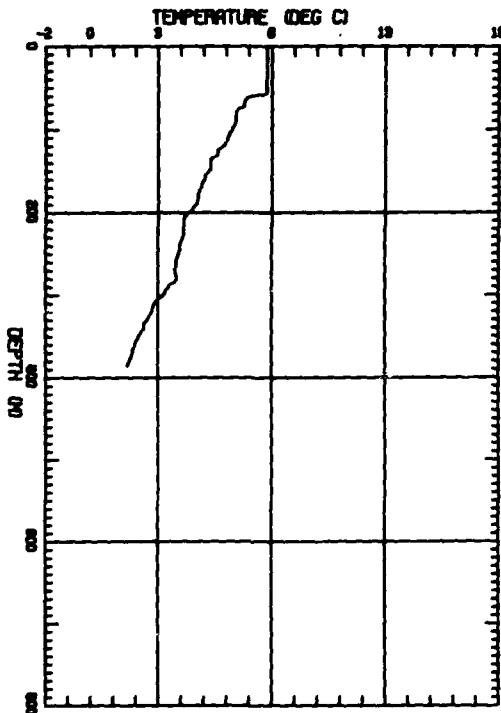
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 576 CHANNEL: 12 LATITUDE: 69 45.9
DATE: 5/28/67 TIME: 12:21.38 LONGITUDE: 3 33.7



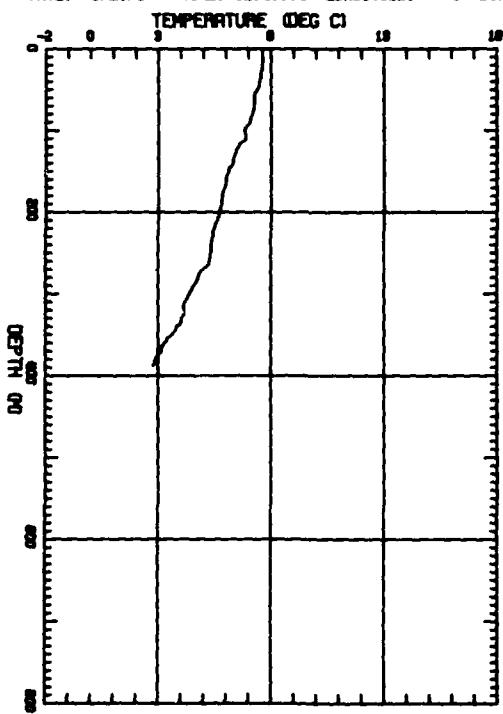
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 578 CHANNEL: 16 LATITUDE: 65 32.0
DATE: 5/28/87 TIME: 12:33:17 LONGITUDE: -2 46.8



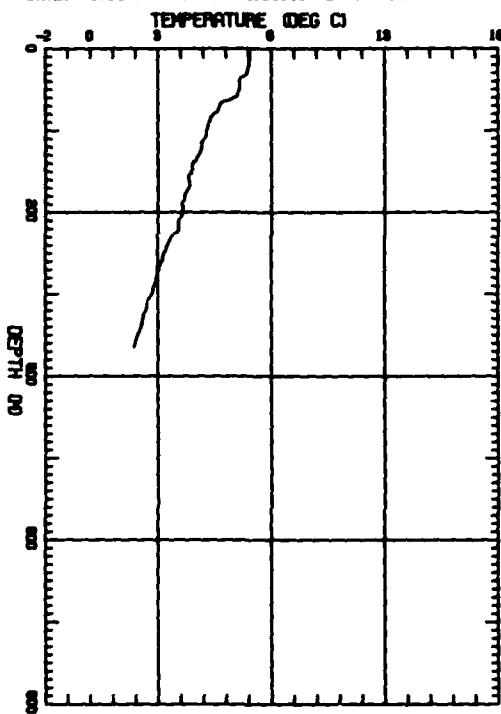
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 578 CHANNEL: 12 LATITUDE: 65 53.6
DATE: 5/28/87 TIME: 12:39:58 LONGITUDE: -1 15.9



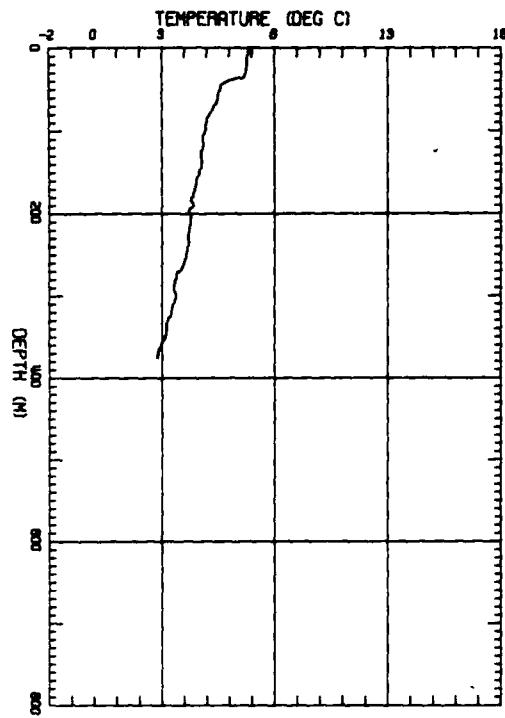
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 580 CHANNEL: 14 LATITUDE: 65 18.2
DATE: 5/28/87 TIME: 12:45:16 LONGITUDE: 0 26.0



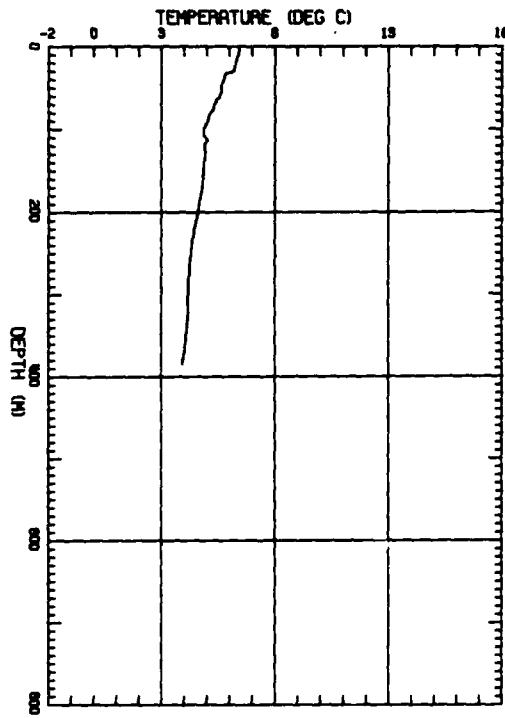
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 581 CHANNEL: 16 LATITUDE: 65 40.5
DATE: 5/28/87 TIME: 12:51:51 LONGITUDE: 0 29.5



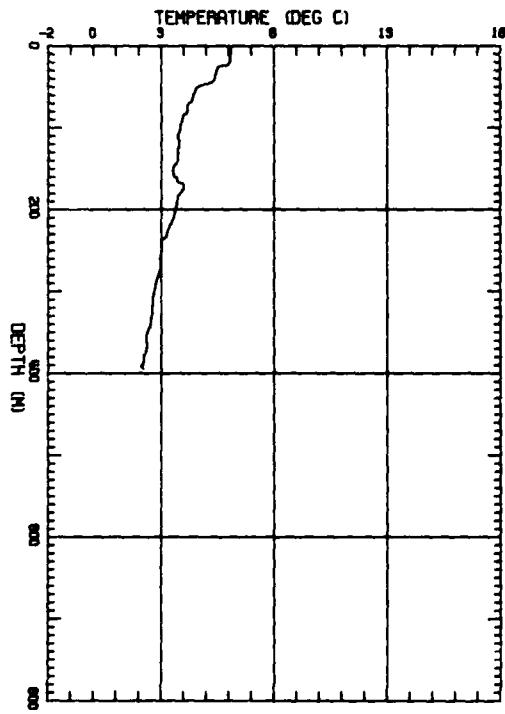
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 582 CHANNEL: 12 LATITUDE: 85 58.5
DATE: 5/26/87 TIME: 12:57:19 LONGITUDE: -1 15.3



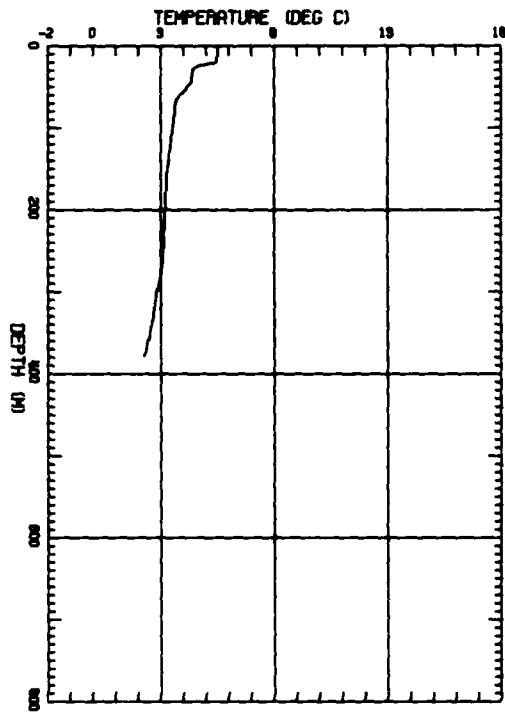
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 583 CHANNEL: 14 LATITUDE: 86 19.5
DATE: 5/26/87 TIME: 13:51:15 LONGITUDE: -2 7.3



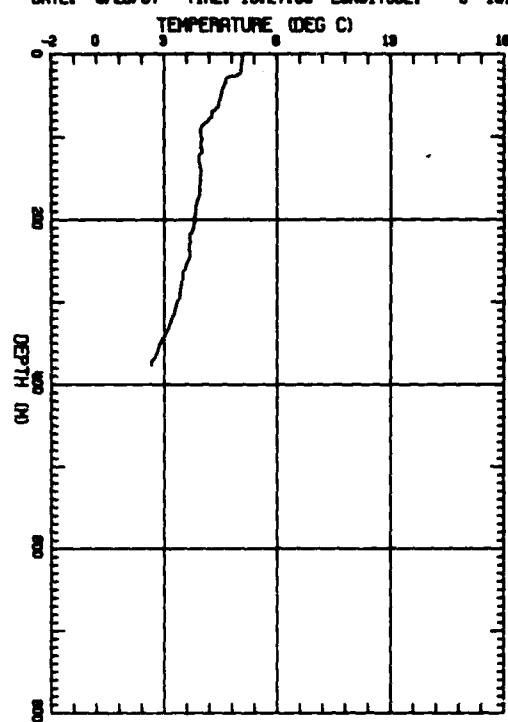
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 584 CHANNEL: 18 LATITUDE: 86 41.0
DATE: 5/26/87 TIME: 13: 9:31 LONGITUDE: -3 41.3



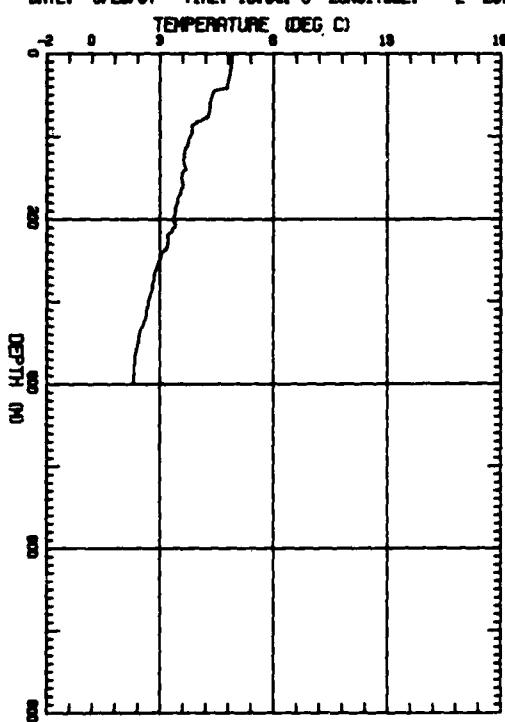
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 585 CHANNEL: 12 LATITUDE: 87 .2
DATE: 5/26/87 TIME: 13:15:20 LONGITUDE: -3 57.5



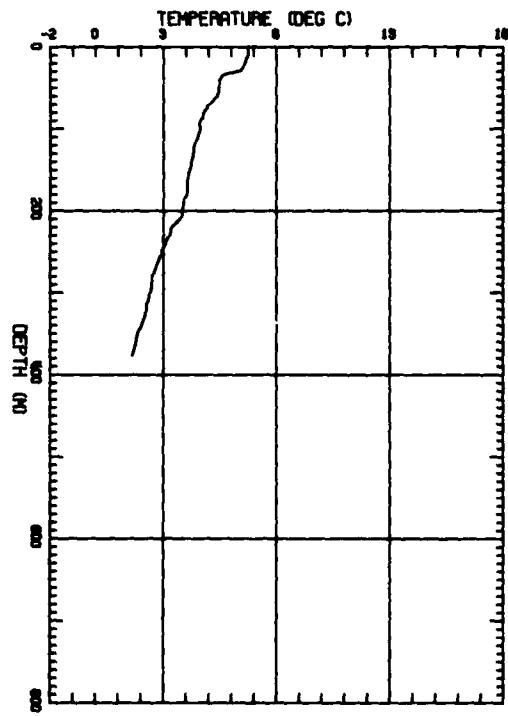
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 16 LATITUDE: 06 17.5
DATE: 5/28/67 TIME: 19:27:50 LONGITUDE: -3 -16.7



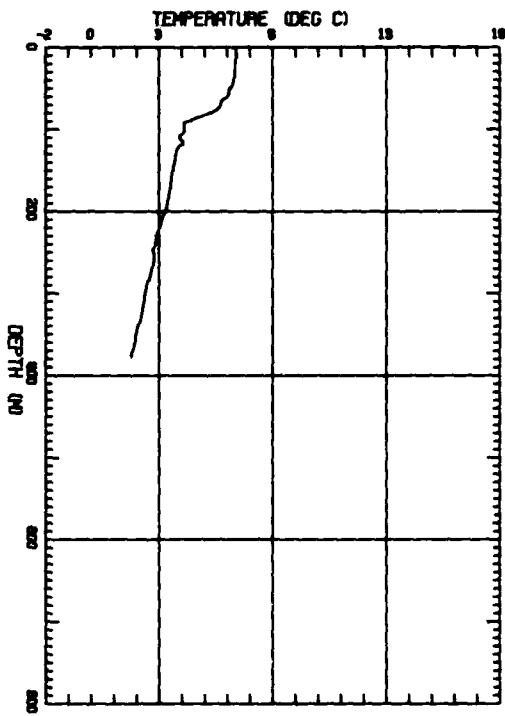
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 587 CHANNEL: 16 LATITUDE: 06 51.6
DATE: 5/28/67 TIME: 19:34:0 LONGITUDE: -2 -29.9



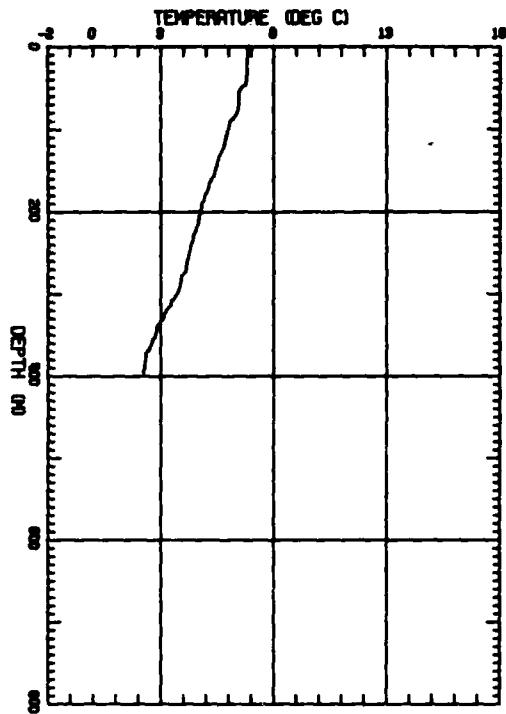
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 588 CHANNEL: 12 LATITUDE: 06 23.0
DATE: 5/28/67 TIME: 19:40:20 LONGITUDE: -1 -58.9



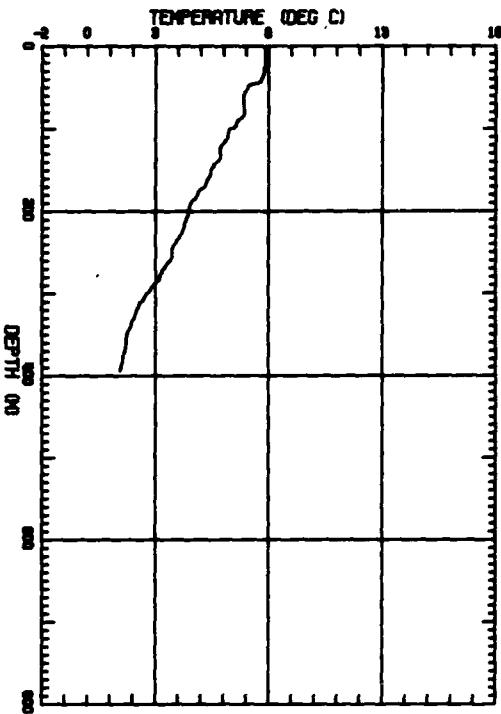
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 588 CHANNEL: 14 LATITUDE: 06 57.4
DATE: 5/28/67 TIME: 19:48:22 LONGITUDE: -1 -27.4



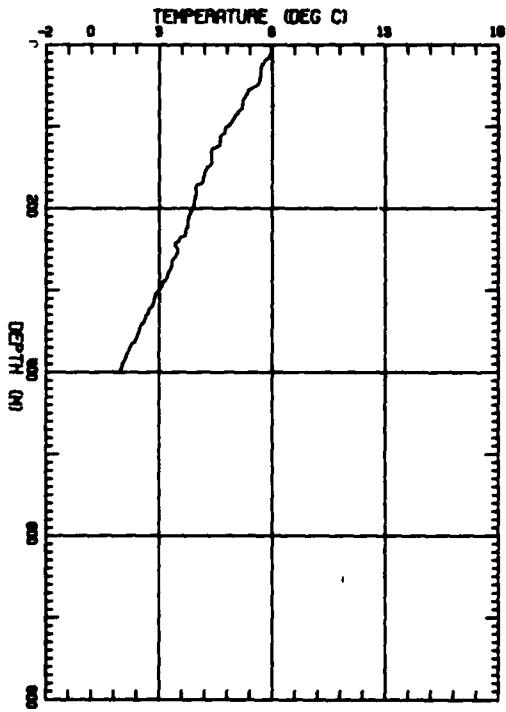
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 580 CHANNEL: 18 LATITUDE: 64 28.3
DATE: 5/26/87 TIME: 13:52:48 LONGITUDE: 0 -60.4



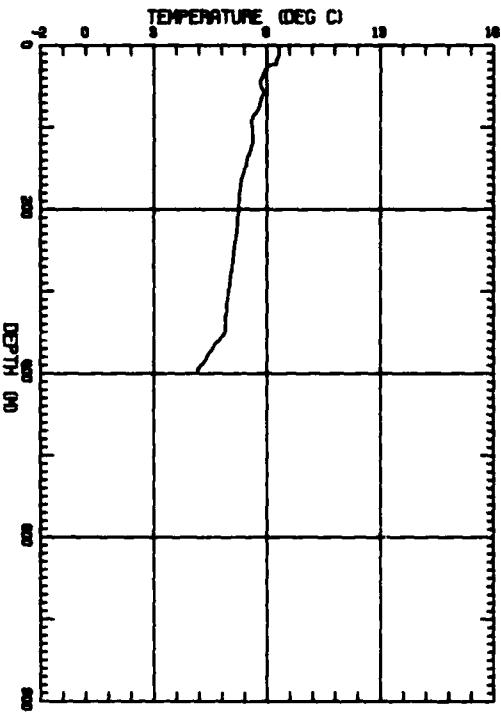
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 582 CHANNEL: 14 LATITUDE: 63 59.6
DATE: 5/26/87 TIME: 14:11:52 LONGITUDE: 0 -3.5



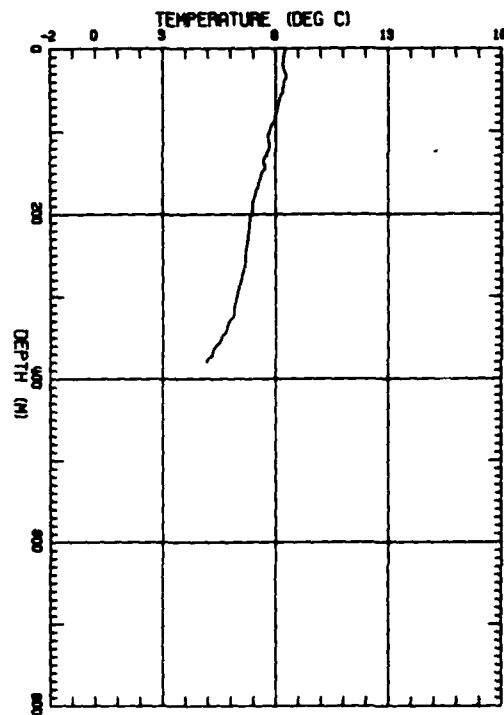
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 583 CHANNEL: 18 LATITUDE: 63 45.7
DATE: 5/26/87 TIME: 14:16:0 LONGITUDE: 0 -39.3



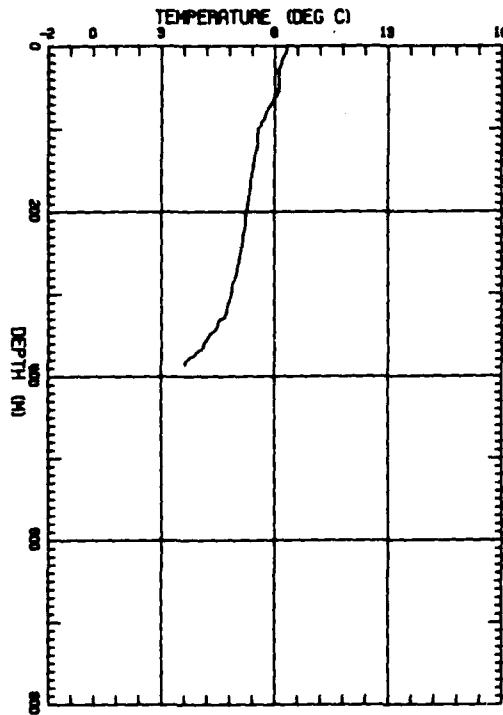
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 12 LATITUDE: 63 31.0
DATE: 5/26/87 TIME: 14:10:20 LONGITUDE: -1 -9.6



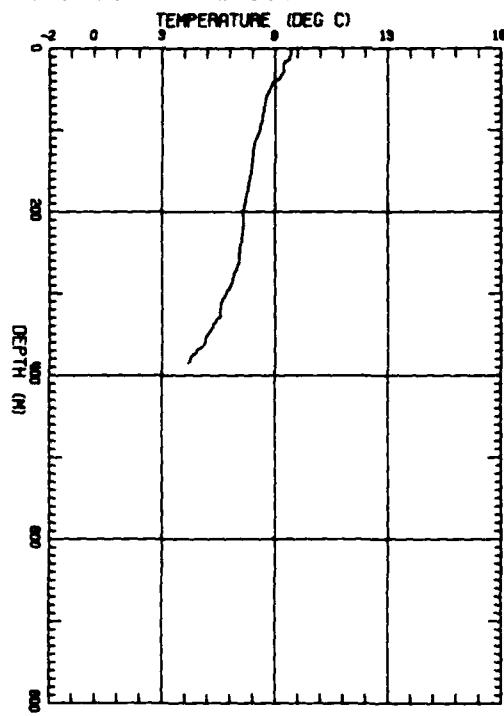
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 585 CHANNEL: 14 LATITUDE: 63 14.0
DATE: 5/26/87 TIME: 14:15:6 LONGITUDE: -1 -36.5



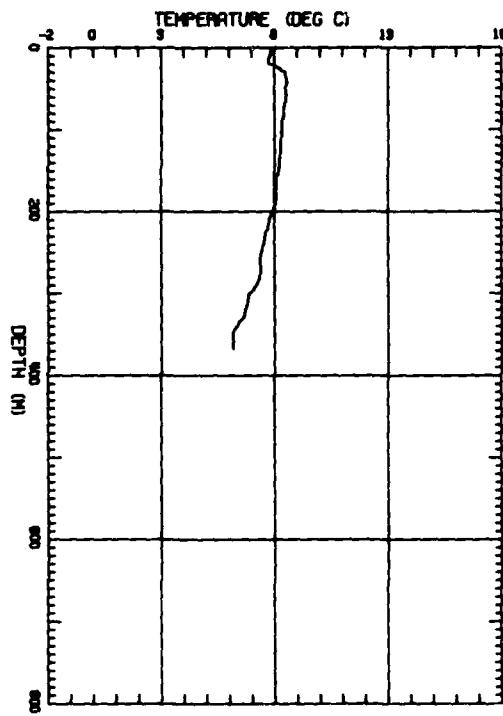
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 586 CHANNEL: 16 LATITUDE: 63 .3
DATE: 5/26/87 TIME: 14:19:6 LONGITUDE: -2 -4.9



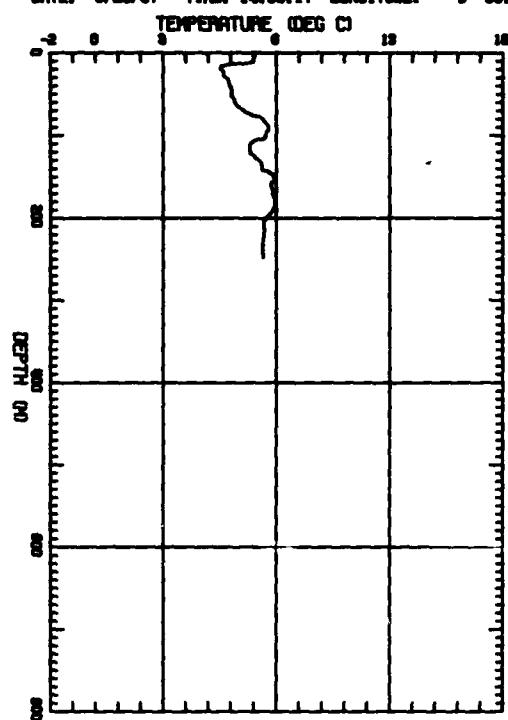
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 587 CHANNEL: 12 LATITUDE: 62 45.5
DATE: 5/26/87 TIME: 14:23:30 LONGITUDE: -2 -33.4



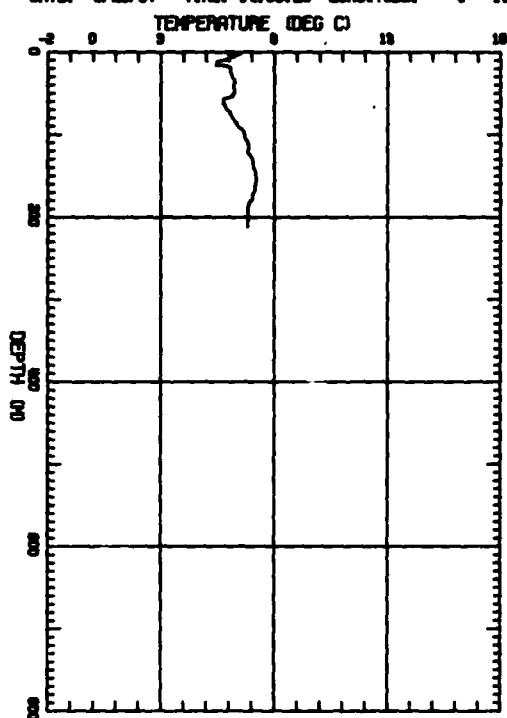
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 588 CHANNEL: 14 LATITUDE: 62 29.7
DATE: 5/26/87 TIME: 14:28:35 LONGITUDE: -3 -1.6



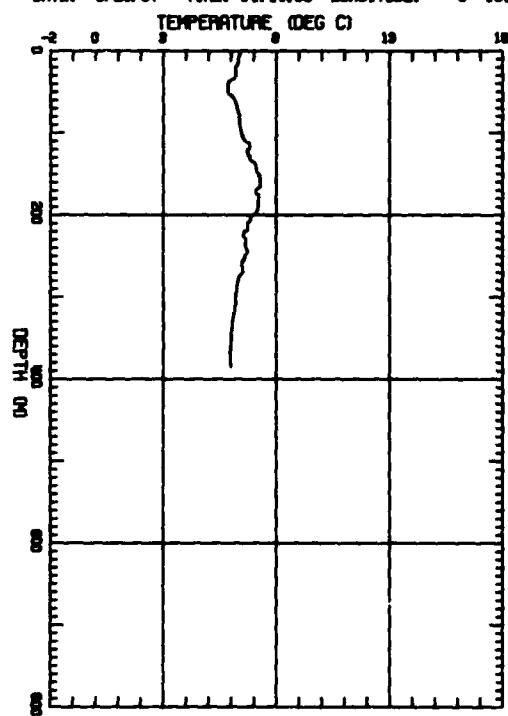
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 500 CHANNEL: 16 LATITUDE: 82 16.1
DATE: 5/28/87 TIME: 14:39:17 LONGITUDE: 9 30.7



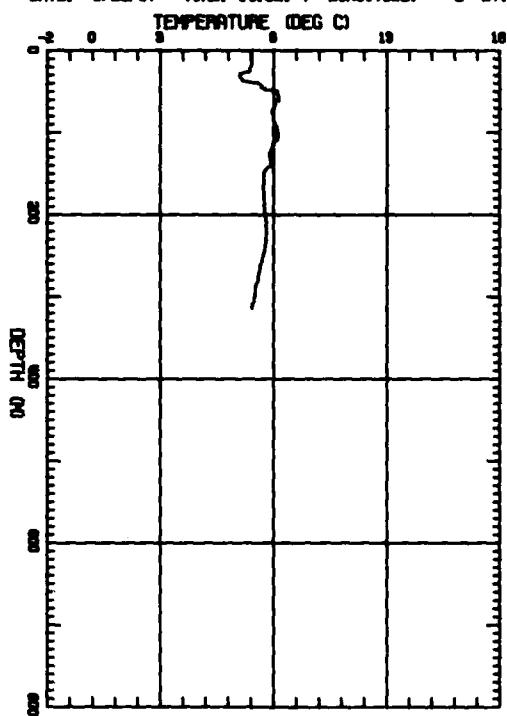
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 600 CHANNEL: 12 LATITUDE: 81 57.7
DATE: 5/28/87 TIME: 14:38:28 LONGITUDE: 9 1.6



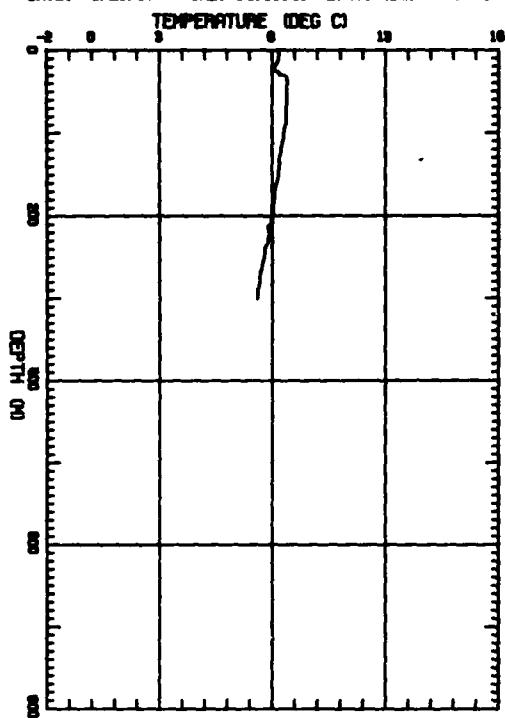
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 601 CHANNEL: 16 LATITUDE: 81 43.1
DATE: 5/28/87 TIME: 14:44:50 LONGITUDE: 9 16.2



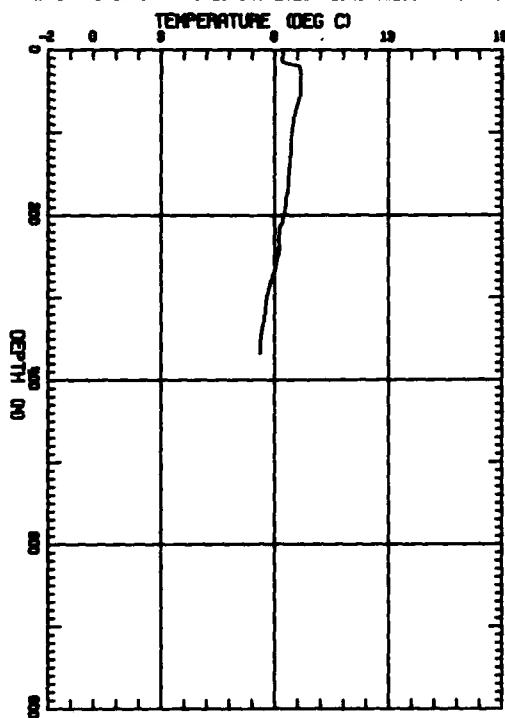
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 602 CHANNEL: 16 LATITUDE: 81 28.6
DATE: 5/28/87 TIME: 14:52: 7 LONGITUDE: 9 27.0



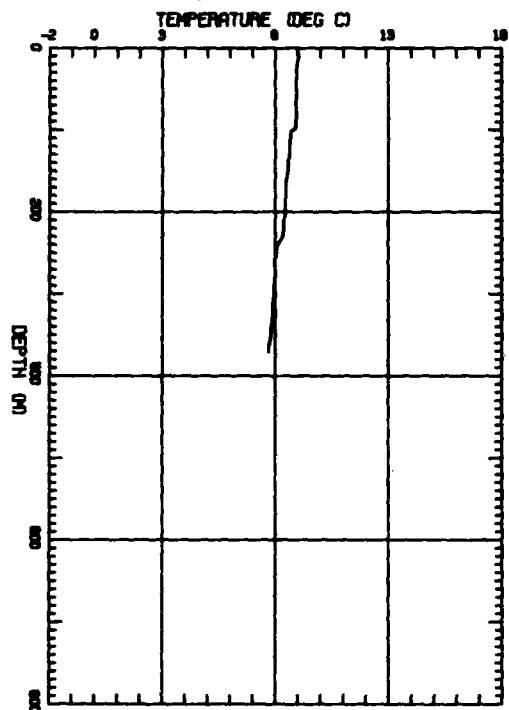
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 806 CHANNEL: 16 LATITUDE: 61 51.8
DATE: 5/28/87 TIME: 14:58:48 LONGITUDE: 1 46.6



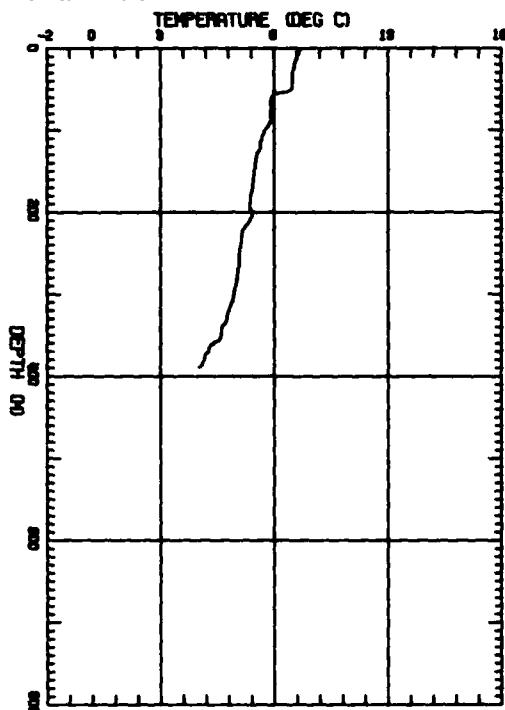
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 806 CHANNEL: 16 LATITUDE: 62 11.1
DATE: 5/28/87 TIME: 15:22:23 LONGITUDE: 1 45.8



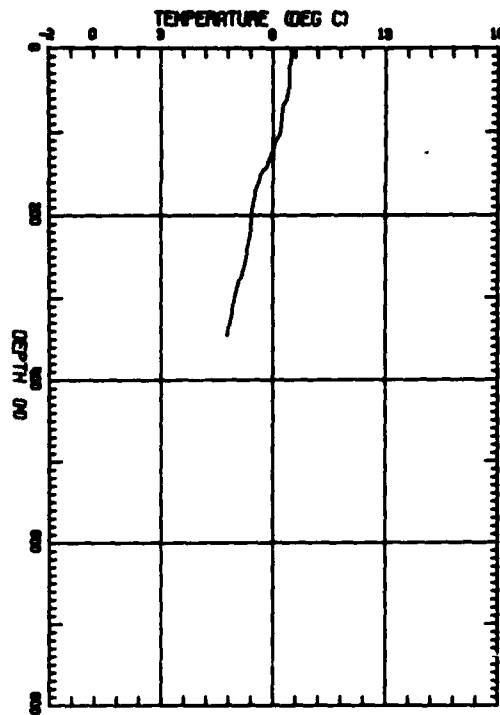
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 806 CHANNEL: 12 LATITUDE: 62 16.8
DATE: 5/28/87 TIME: 15:53:32 LONGITUDE: 1 5.2



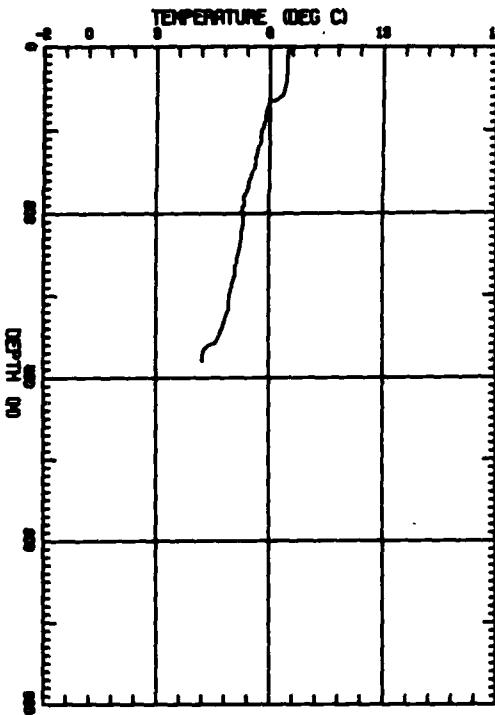
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 807 CHANNEL: 14 LATITUDE: 62 26.3
DATE: 5/28/87 TIME: 15:55:55 LONGITUDE: 0 42.6



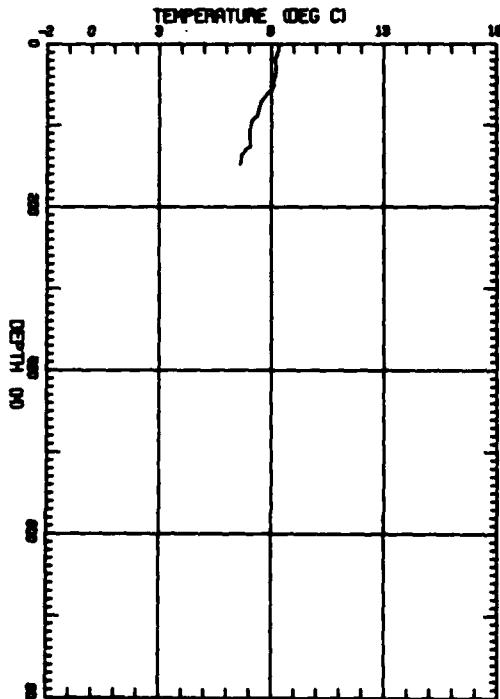
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 608 CHANNEL: 18 LATITUDE: 62 56.8
DATE: 5/28/87 TIME: 15:18:41 LONGITUDE: 0 -3.6



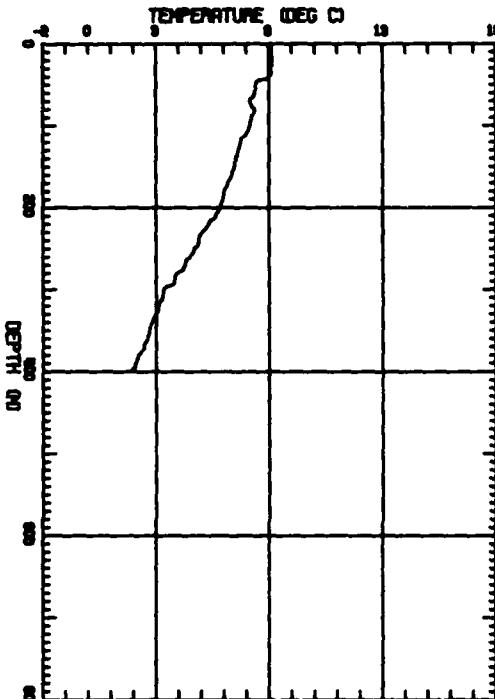
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 608 CHANNEL: 12 LATITUDE: 62 30.3
DATE: 5/28/87 TIME: 15:18: 8 LONGITUDE: 0 -6.1



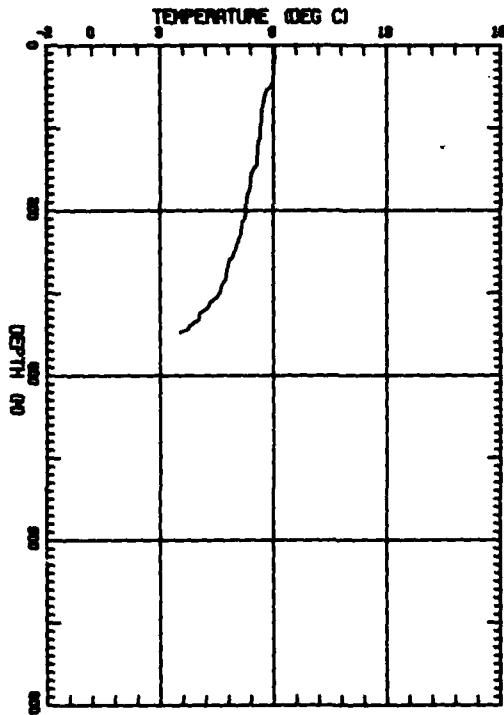
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 610 CHANNEL: 18 LATITUDE: 62 56.8
DATE: 5/28/87 TIME: 15:18:48 LONGITUDE: 0 -23.8



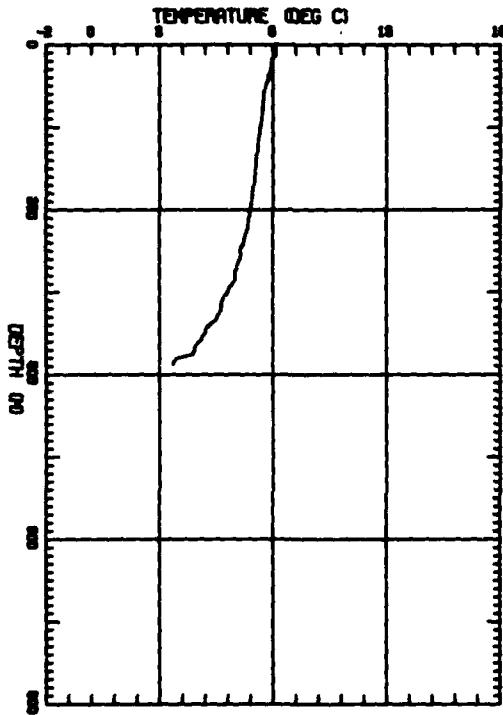
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 611 CHANNEL: 18 LATITUDE: 63 8.2
DATE: 5/28/87 TIME: 15:22:22 LONGITUDE: 0 -46.8



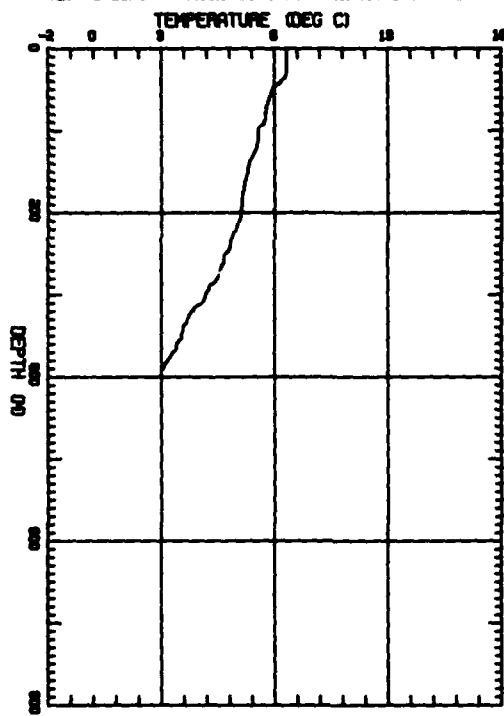
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 613 CHANNEL: 16 LATITUDE: 63 10.8
DATE: 5/26/87 TIME: 15:30:38 LONGITUDE: -2 -6.3



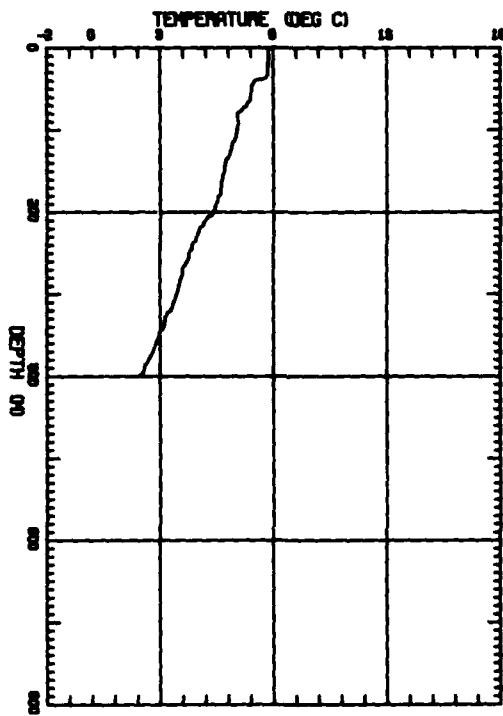
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 614 CHANNEL: 16 LATITUDE: 63 .7
DATE: 5/26/87 TIME: 15:30:15 LONGITUDE: -3 -.1



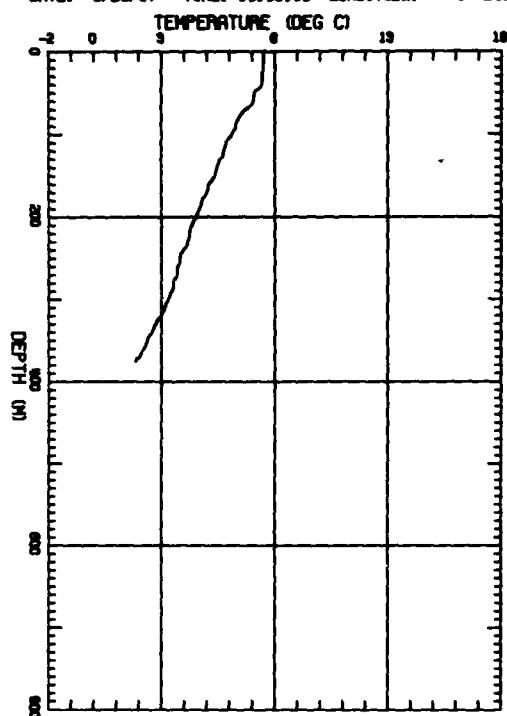
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 615 CHANNEL: 12 LATITUDE: 62 45.1
DATE: 5/26/87 TIME: 15:41:22 LONGITUDE: -2 -27.6



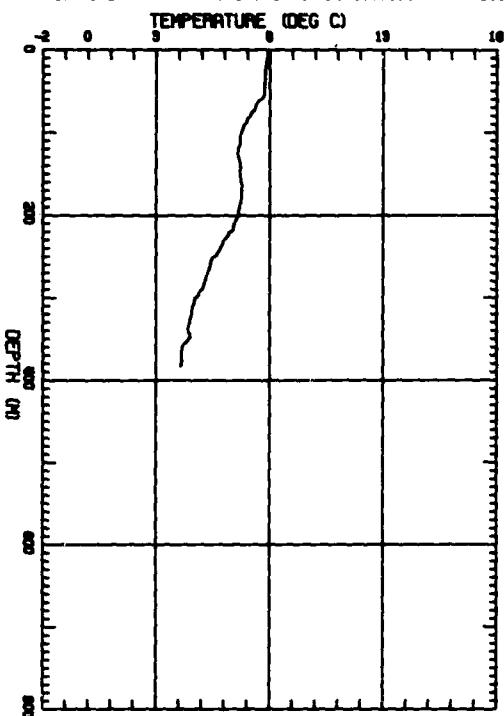
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 616 CHANNEL: 16 LATITUDE: 62 32.5
DATE: 5/26/87 TIME: 15:46:38 LONGITUDE: -1 -67.3



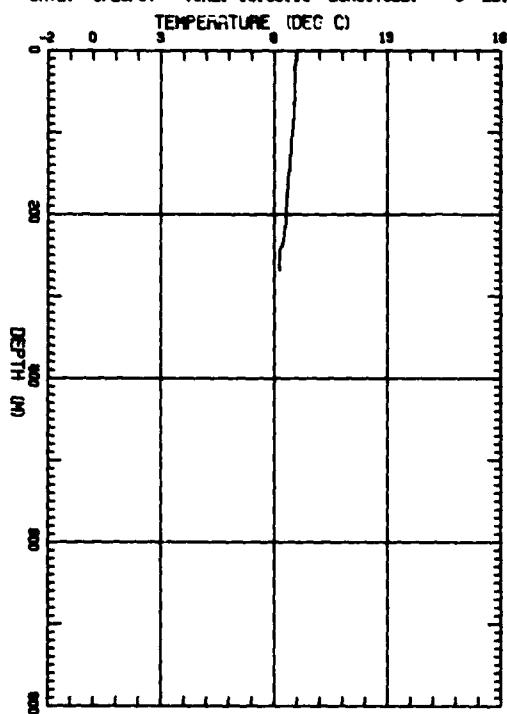
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 617 CHANNEL: 16 LATITUDE: 62 18.2
DATE: 5/28/87 TIME: 15:50:10 LONGITUDE: -1 -24.7



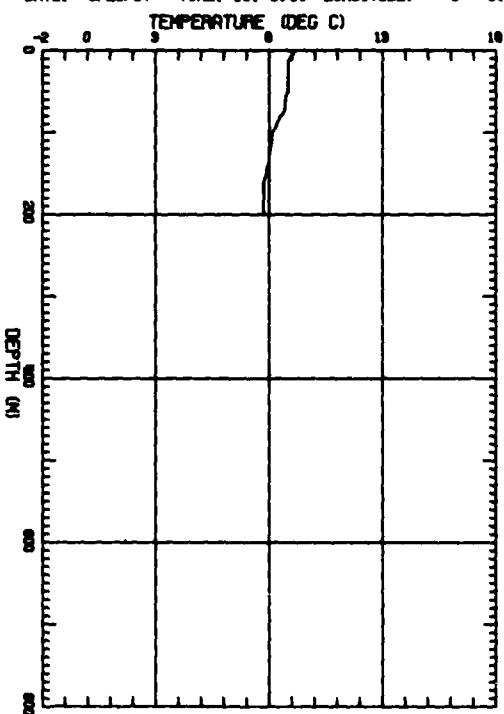
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 618 CHANNEL: 12 LATITUDE: 62 5.5
DATE: 5/28/87 TIME: 15:54:44 LONGITUDE: 0 -53.5



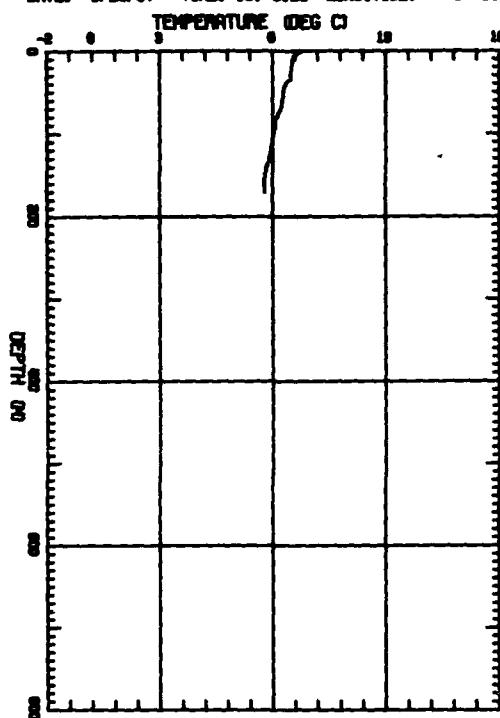
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 619 CHANNEL: 14 LATITUDE: 61 52.3
DATE: 5/28/87 TIME: 15:59:10 LONGITUDE: 0 -22.2



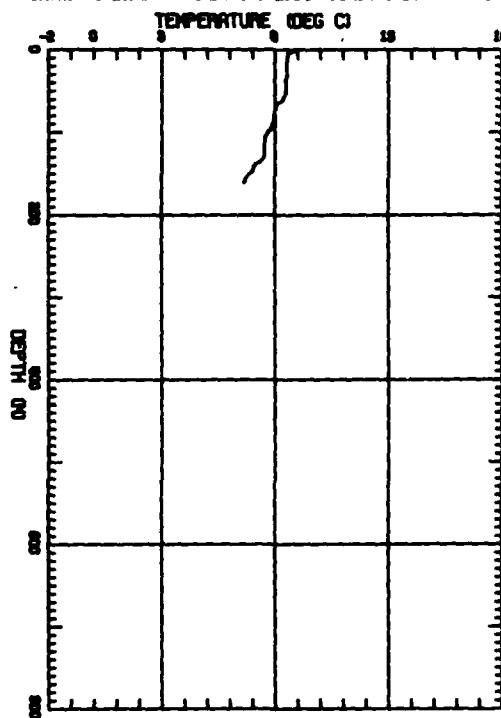
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 620 CHANNEL: 16 LATITUDE: 61 37.7
DATE: 5/28/87 TIME: 16:3:44 LONGITUDE: 0 -6.8



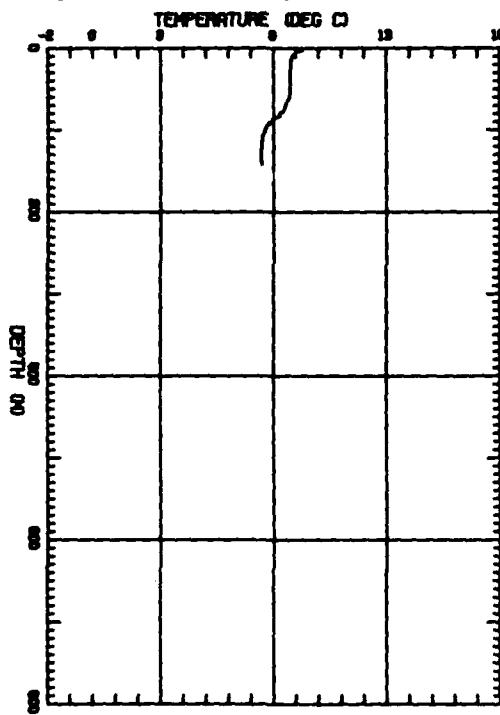
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 622 CHANNEL: 12 LATITUDE: 61 23.5
DATE: 5/28/87 TIME: 16:02:28 LONGITUDE: 0 38.3



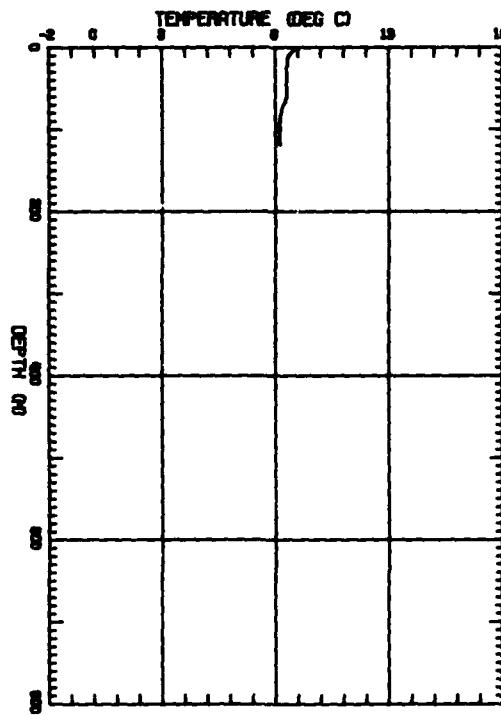
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 622 CHANNEL: 14 LATITUDE: 61 12.3
DATE: 5/28/87 TIME: 16:12:54 LONGITUDE: 0 38.8



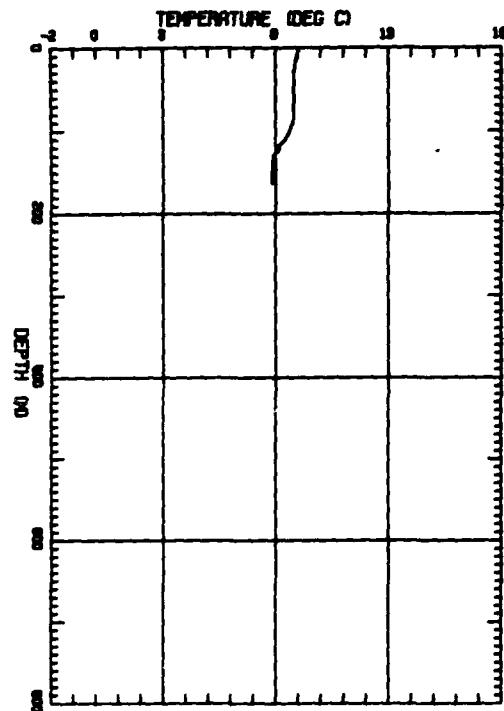
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 623 CHANNEL: 18 LATITUDE: 61 5.3
DATE: 5/28/87 TIME: 16:18:58 LONGITUDE: 0 .9



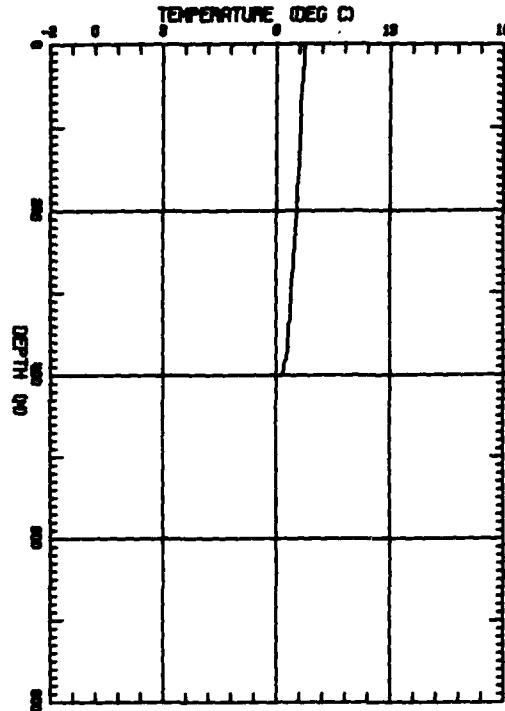
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 623 CHANNEL: 12 LATITUDE: 61 -.3
DATE: 5/28/87 TIME: 16:28:2 LONGITUDE: 0 -50.5



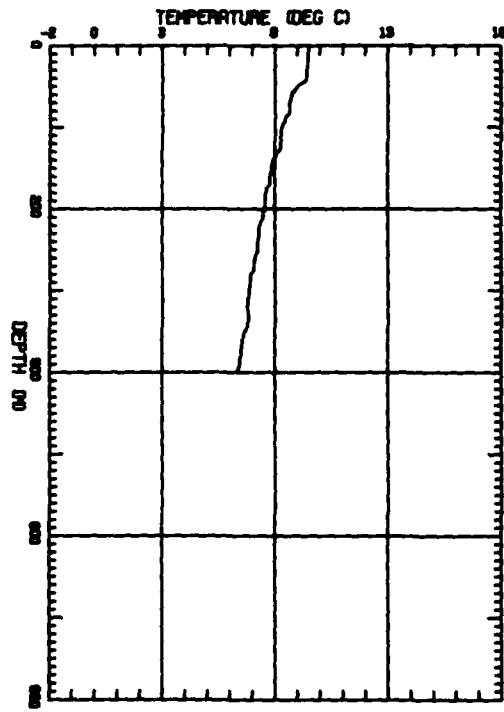
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 628 CHANNEL: 14 LATITUDE: 61 11.3
DATE: 5/28/87 TIME: 16:29:32 LONGITUDE: -1 -22.7



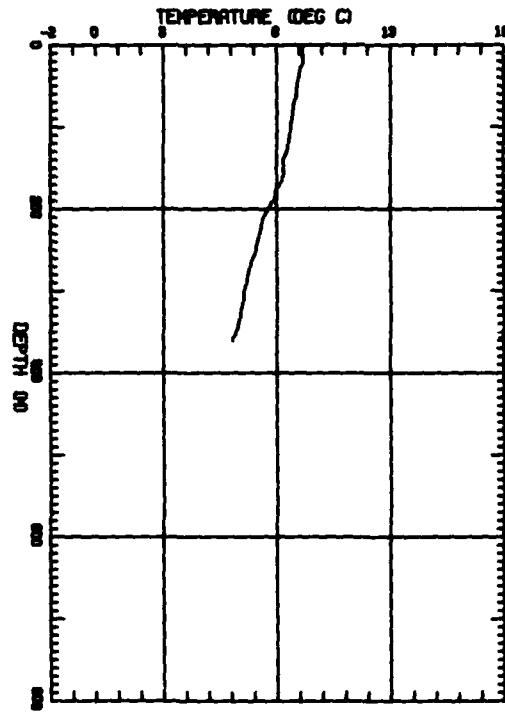
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 627 CHANNEL: 16 LATITUDE: 61 21.5
DATE: 5/28/87 TIME: 16:32:06 LONGITUDE: -1 -48.0



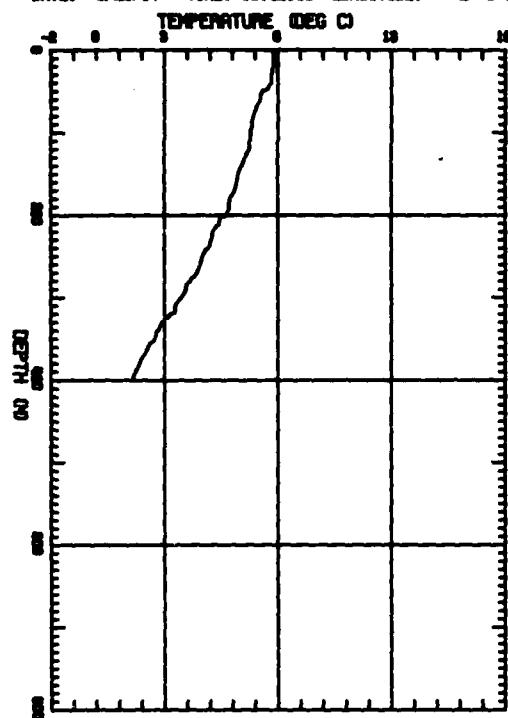
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 628 CHANNEL: 12 LATITUDE: 61 31.3
DATE: 5/28/87 TIME: 16:38:06 LONGITUDE: -2 -6.7



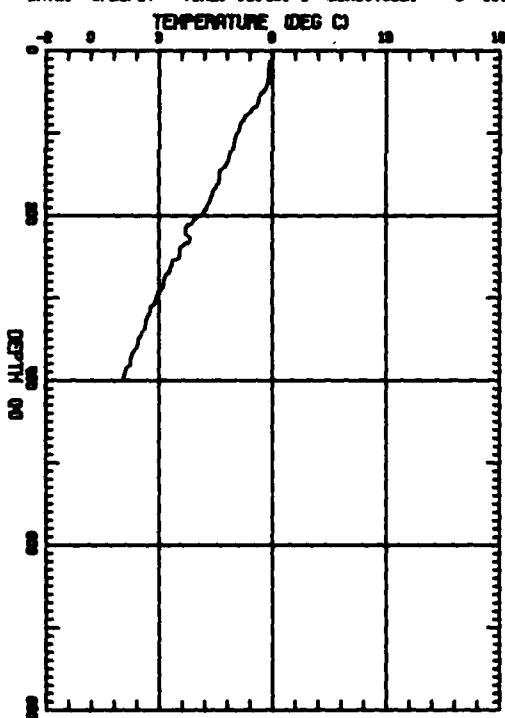
PROJECT: TACTICAL SEISMOGRAPHY
DROP NO: 628 CHANNEL: 14 LATITUDE: 61 41.8
DATE: 5/28/87 TIME: 16:38:38 LONGITUDE: -2 -32.6



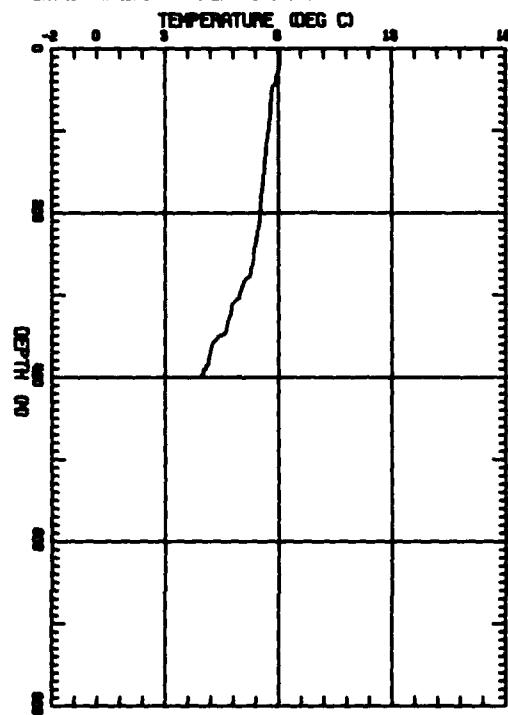
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 680 CHANNEL: 10 LATITUDE: 61 52.0
DATE: 5/28/87 TIME: 10:42:38 LONGITUDE: -2 57.0



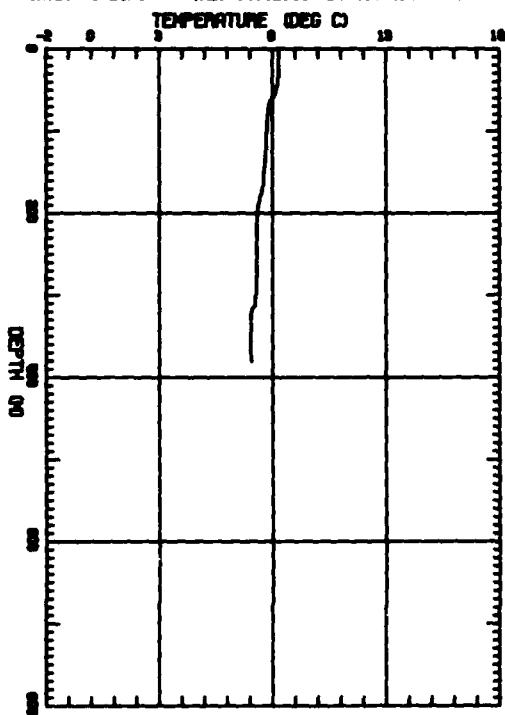
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 681 CHANNEL: 12 LATITUDE: 62 1.7
DATE: 5/28/87 TIME: 10:43:41 LONGITUDE: -3 10.8



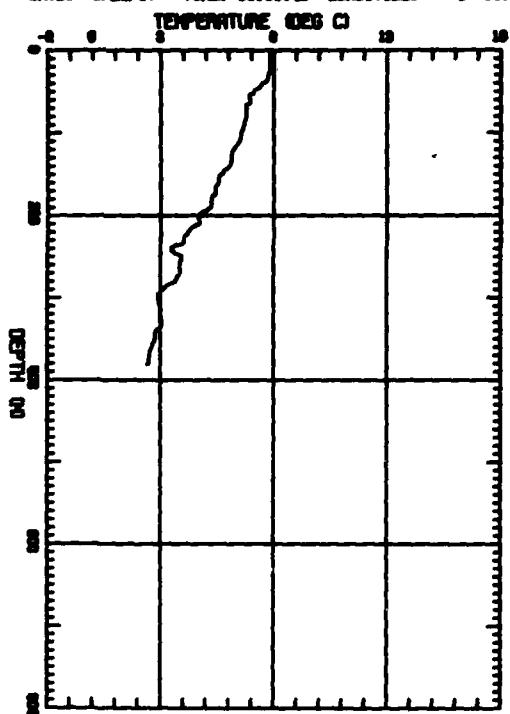
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 682 CHANNEL: 16 LATITUDE: 62 11.8
DATE: 5/28/87 TIME: 10:49:21 LONGITUDE: -3 46.4



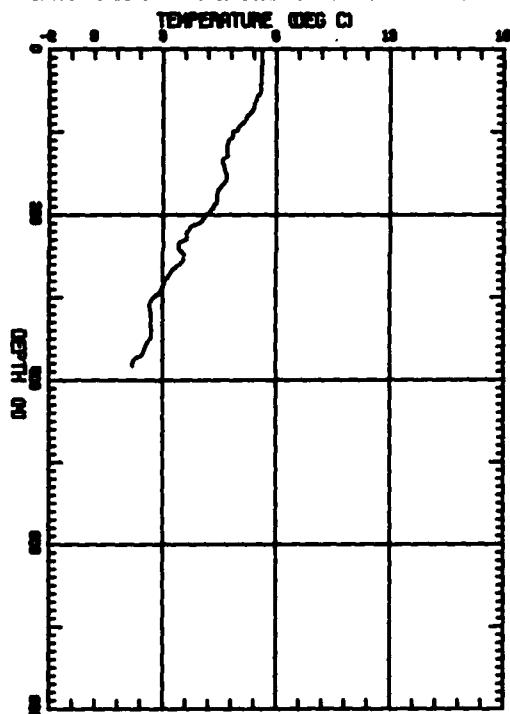
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 683 CHANNEL: 16 LATITUDE: 62 22.3
DATE: 5/28/87 TIME: 10:52:48 LONGITUDE: -4 0.8



PROJECT: TECTONIC SEISMOMETRY
DRIP NO: 005 CHANNEL: 12 LATITUDE: 62 31.6
DATE: 5/28/87 TIME: 10:55:48 LONGITUDE: -4 48.0

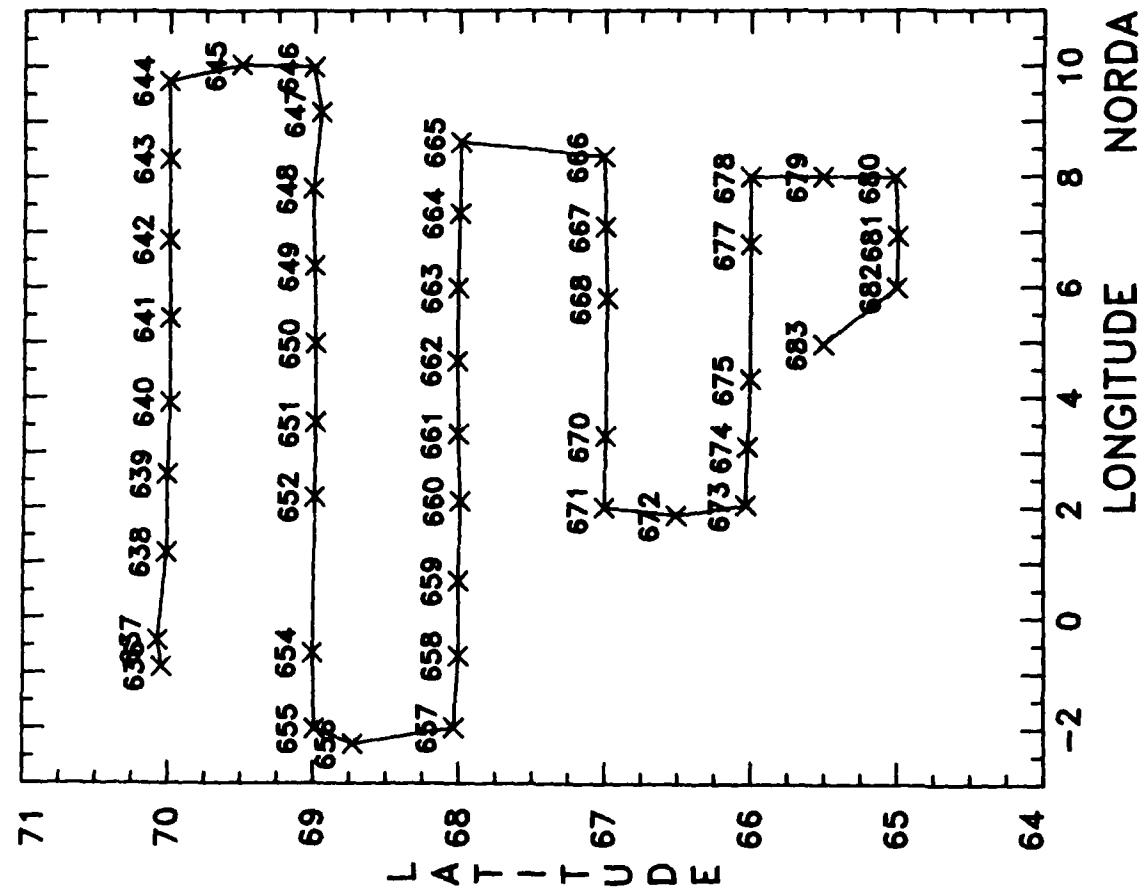


PROJECT: TECTONIC SEISMOMETRY
DRIP NO: 005 CHANNEL: 16 LATITUDE: 62 39.0
DATE: 5/28/87 TIME: 10:59:47 LONGITUDE: -4 45.0

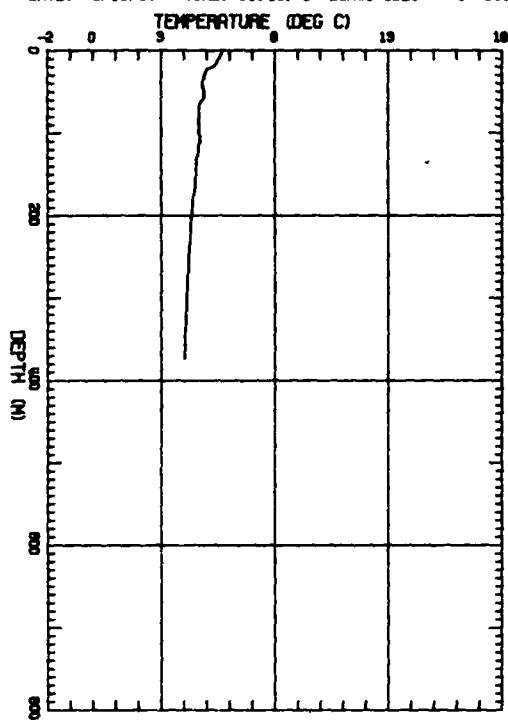


Appendix H.
Drop Positions and Data Profiles, Flight 8,
30 May 1987, Northern Norwegian Sea.

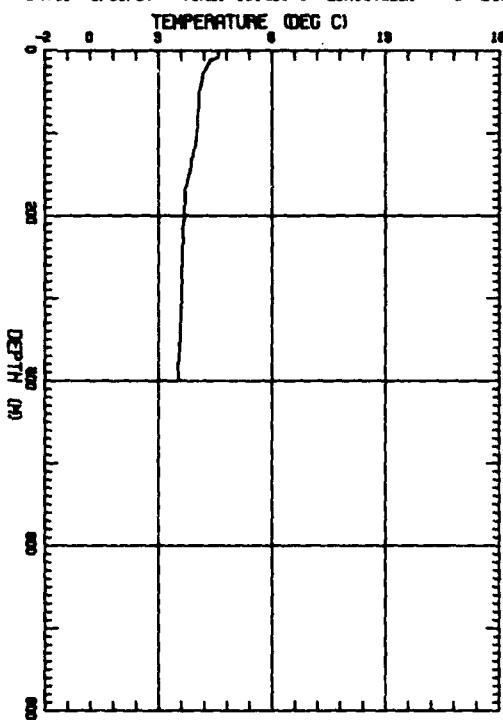
45 AXBTs 30 May 1987



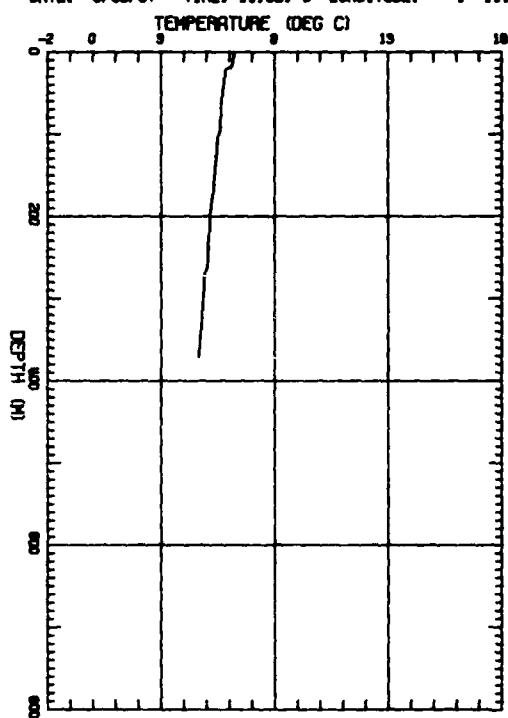
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 636 CHANNEL: 14 LATITUDE: 70 2.7
DATE: 5/30/87 TIME: 11:44:0 LONGITUDE: 0 -53.0



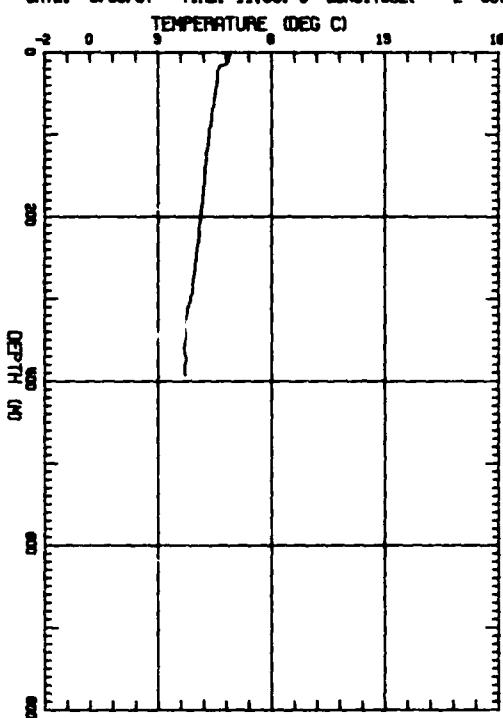
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 637 CHANNEL: 16 LATITUDE: 70 6.2
DATE: 5/30/87 TIME: 11:45:0 LONGITUDE: 0 -24.1



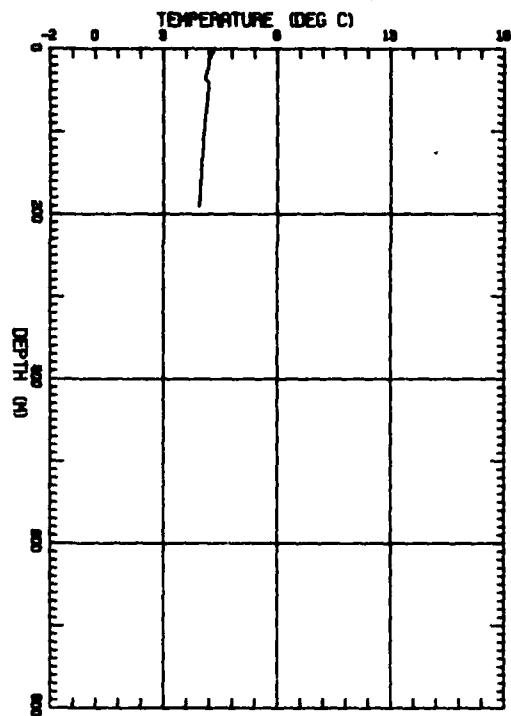
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 638 CHANNEL: 14 LATITUDE: 70 .5
DATE: 5/30/87 TIME: 11:52:0 LONGITUDE: -1 -11.2



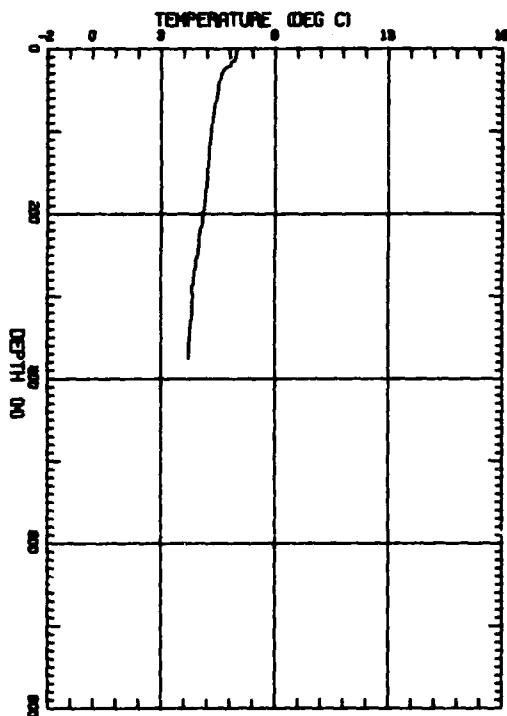
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 639 CHANNEL: 16 LATITUDE: 70 .3
DATE: 5/30/87 TIME: 11:58:0 LONGITUDE: -2 -36.4



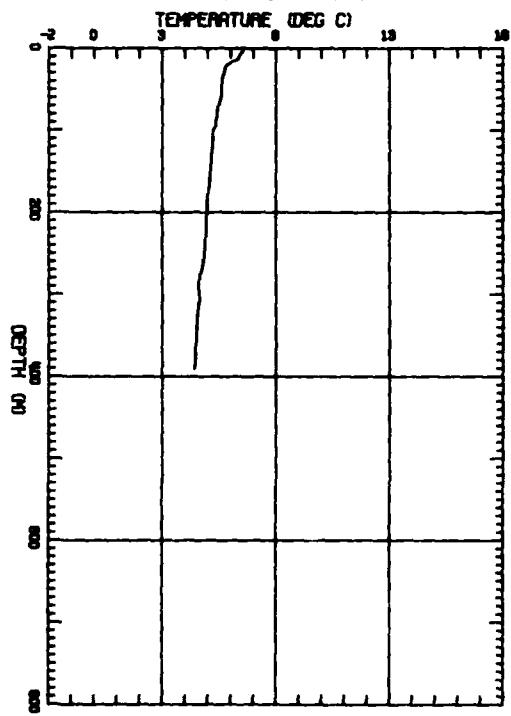
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 860 CHANNEL: 18 LATITUDE: 88 59.5
DATE: 5/30/87 TIME: 12:34:0 LONGITUDE: -6 -54.6



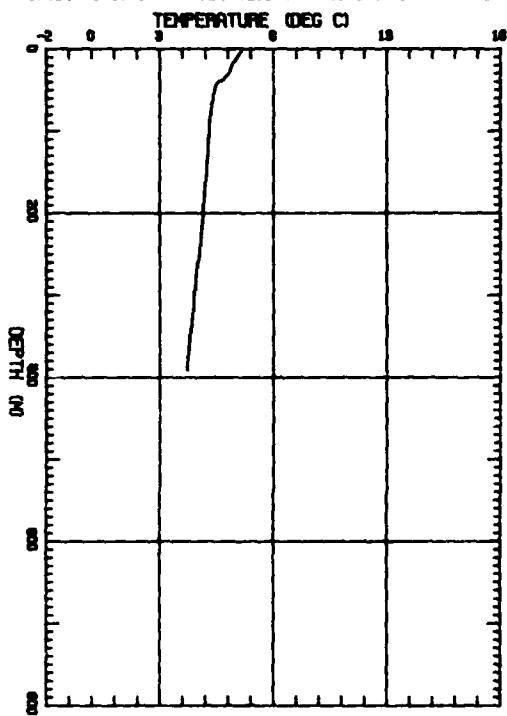
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 861 CHANNEL: 18 LATITUDE: 88 59.5
DATE: 5/30/87 TIME: 12:37:0 LONGITUDE: -6 -54.6



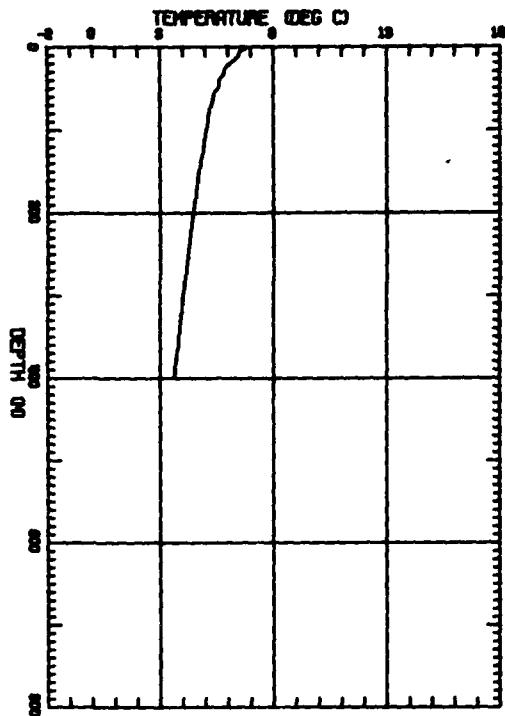
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 862 CHANNEL: 18 LATITUDE: 88 59.6
DATE: 5/30/87 TIME: 12:15:0 LONGITUDE: -6 -51.6



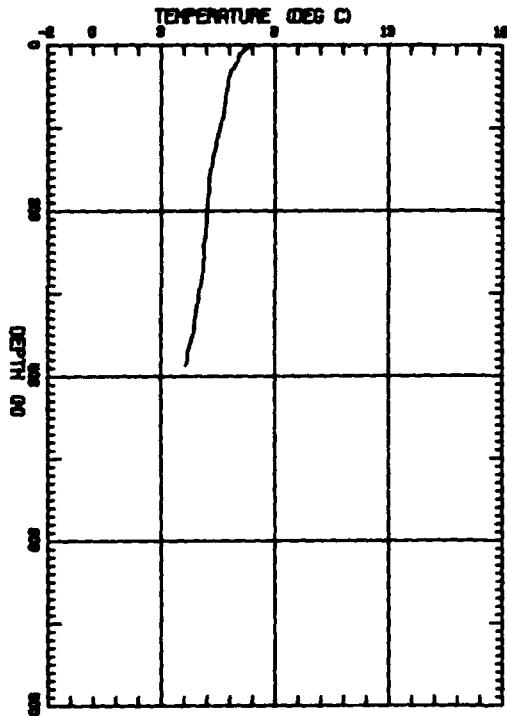
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 863 CHANNEL: 18 LATITUDE: 88 59.7
DATE: 5/30/87 TIME: 12:20:0 LONGITUDE: -6 -19.6



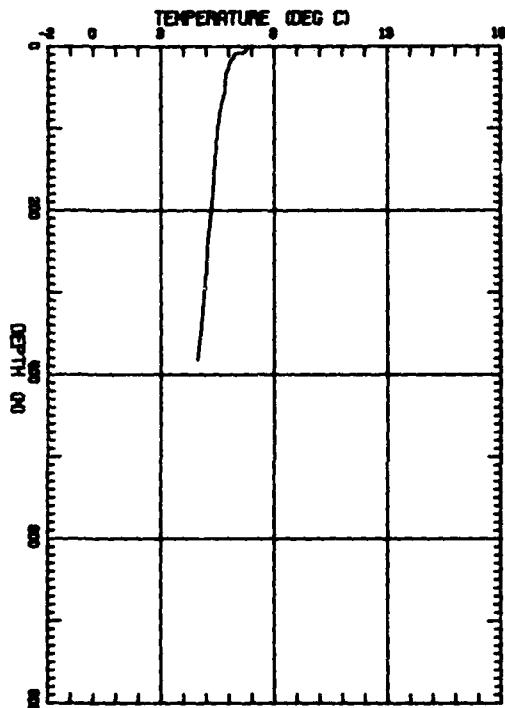
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 866 CHANNEL: 16 LATITUDE: 00 59.0
DATE: 5/30/87 TIME: 12:30:0 LONGITUDE: -0 -46.3



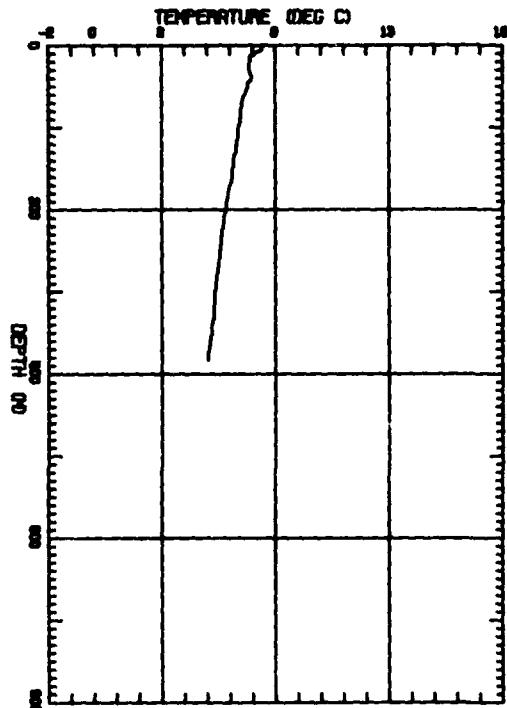
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 866 CHANNEL: 12 LATITUDE: 00 59.0
DATE: 5/30/87 TIME: 12:30:0 LONGITUDE: -10 -1.7



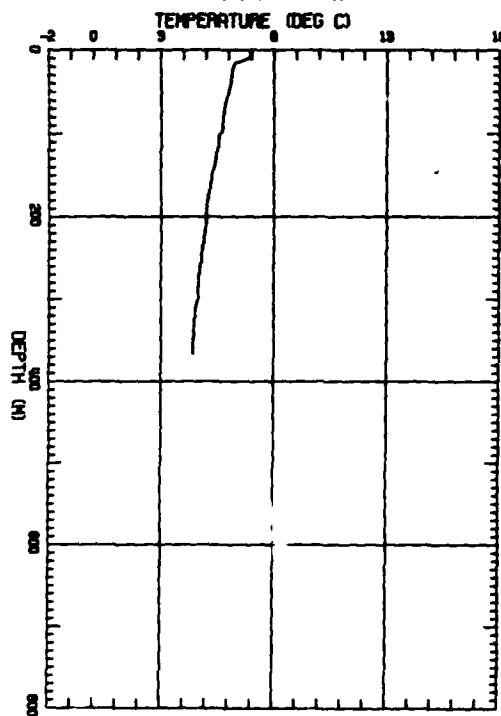
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 866 CHANNEL: 16 LATITUDE: 00 59.0
DATE: 5/30/87 TIME: 12:30:0 LONGITUDE: -0 -56.0



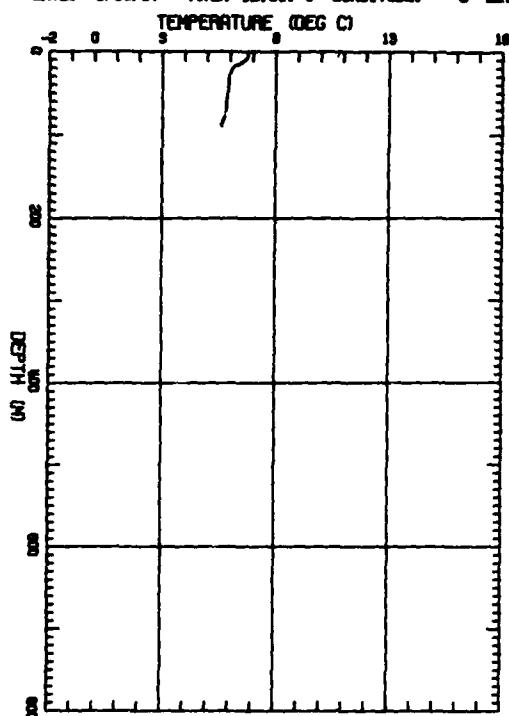
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 867 CHANNEL: 18 LATITUDE: 00 57.0
DATE: 5/30/87 TIME: 12:45:0 LONGITUDE: -0 -10.4



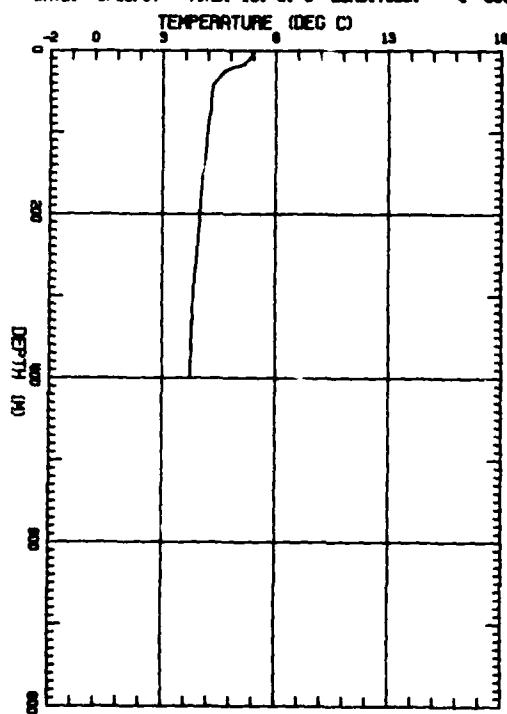
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 868 CHANNEL: 14 LATITUDE: 68 .4
DATE: 5/30/87 TIME: 12:48:0 LONGITUDE: -4 -47.2



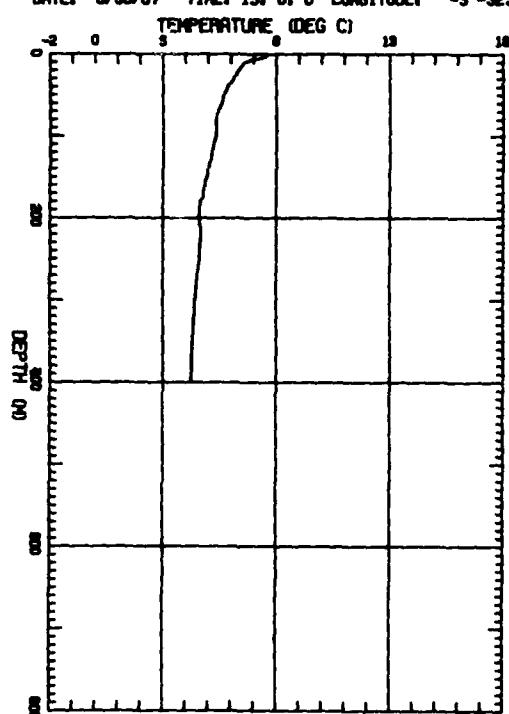
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 868 CHANNEL: 12 LATITUDE: 68 59.6
DATE: 5/30/87 TIME: 12:55:0 LONGITUDE: -4 -22.8



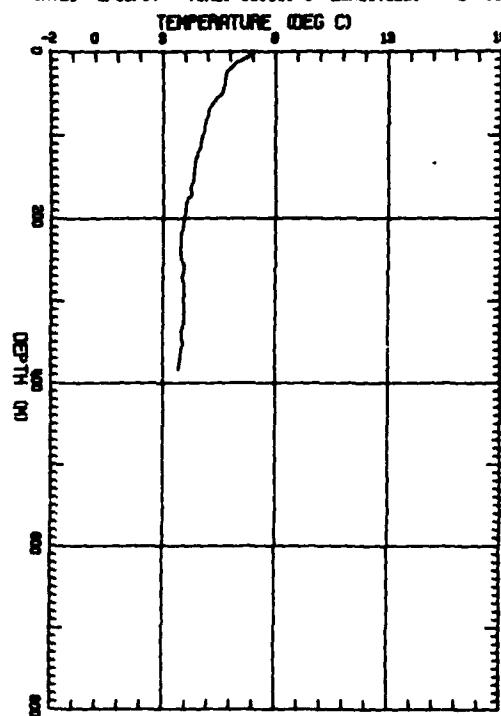
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 860 CHANNEL: 14 LATITUDE: 68 59.1
DATE: 5/30/87 TIME: 13:0:0 LONGITUDE: -4 -58.6



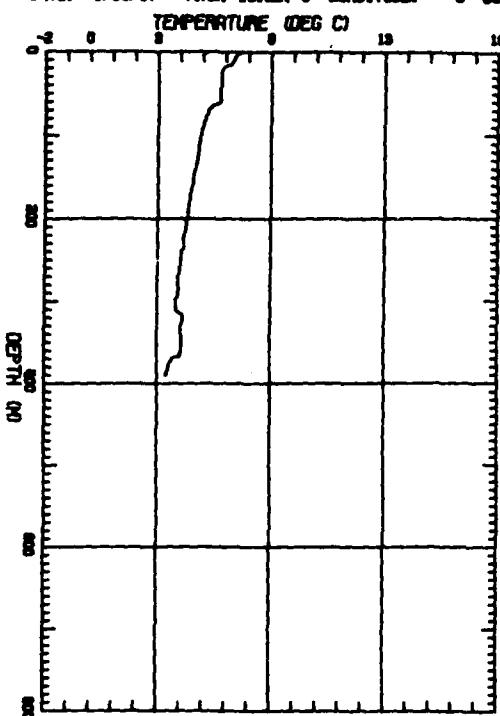
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 861 CHANNEL: 18 LATITUDE: 68 59.1
DATE: 5/30/87 TIME: 13:0:0 LONGITUDE: -3 -32.6



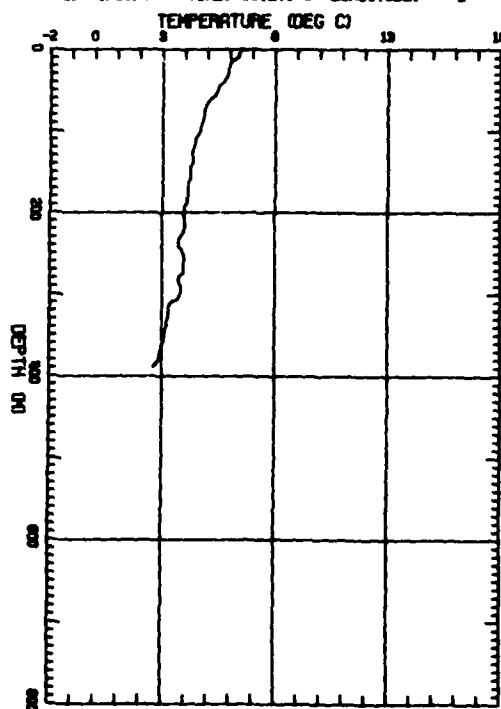
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 652 CHANNEL: 12 LATITUDE: 00 59.1
DATE: 5/30/87 TIME: 19:11:0 LONGITUDE: -2 11.5



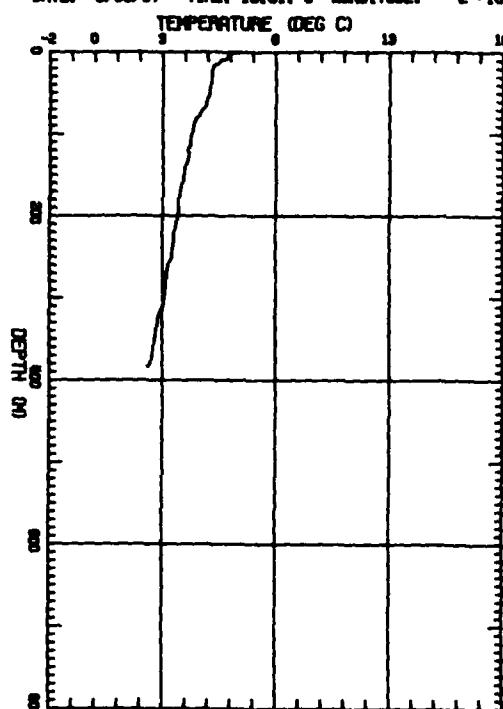
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 656 CHANNEL: 16 LATITUDE: 00 .1
DATE: 5/30/87 TIME: 19:22:0 LONGITUDE: 0 -36.0



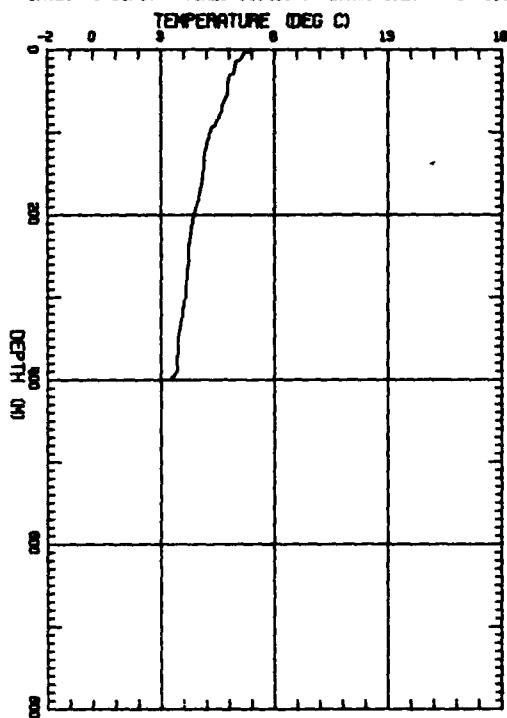
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 655 CHANNEL: 12 LATITUDE: 00 59.2
DATE: 5/30/87 TIME: 19:27:0 LONGITUDE: -2 -.3



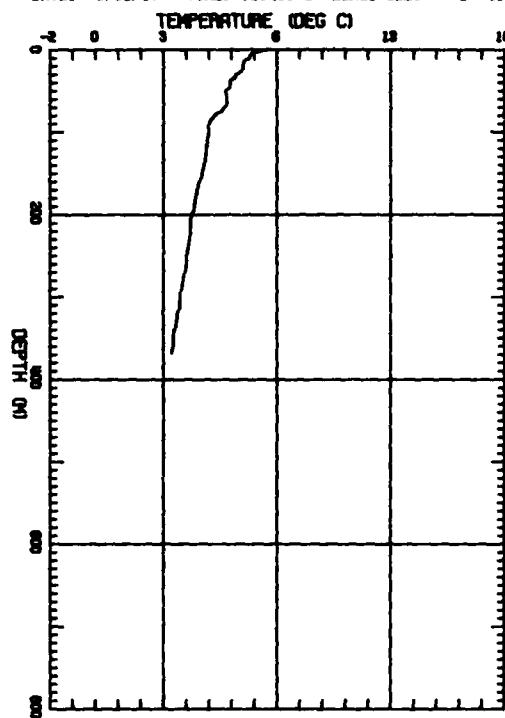
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 658 CHANNEL: 16 LATITUDE: 00 59.4
DATE: 5/30/87 TIME: 19:31:0 LONGITUDE: -2 -16.6



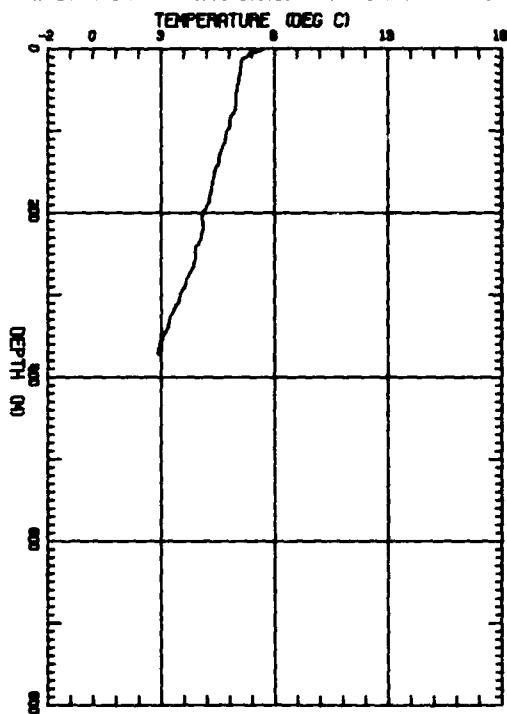
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 657 CHANNEL: 16 LATITUDE: 68 1.6
DATE: 5/30/87 TIME: 13:40:0 LONGITUDE: -1 -58.9



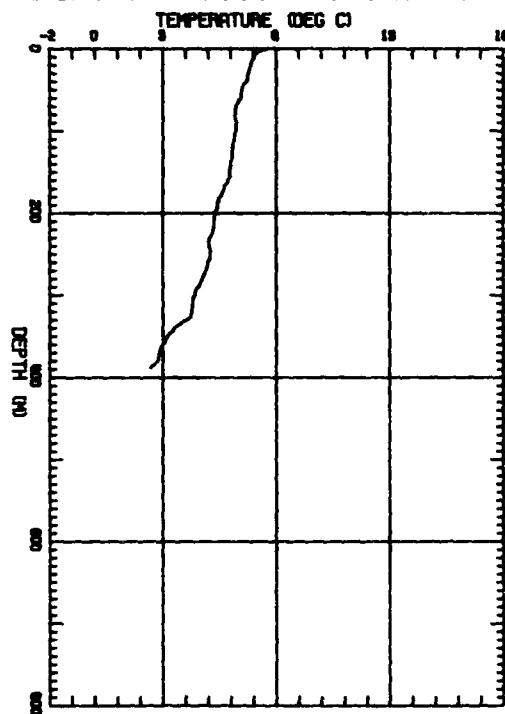
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 658 CHANNEL: 12 LATITUDE: 68 .0
DATE: 5/30/87 TIME: 13:40:0 LONGITUDE: 0 -41.5



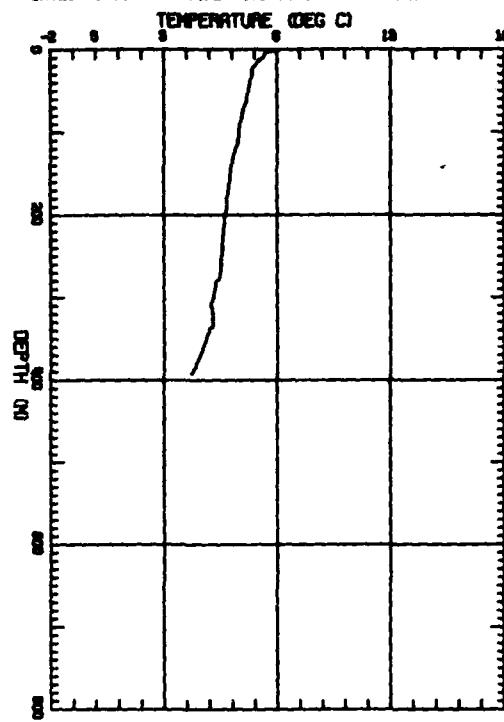
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 659 CHANNEL: 16 LATITUDE: 67 59.9
DATE: 5/30/87 TIME: 13:52:0 LONGITUDE: 0 -40.2



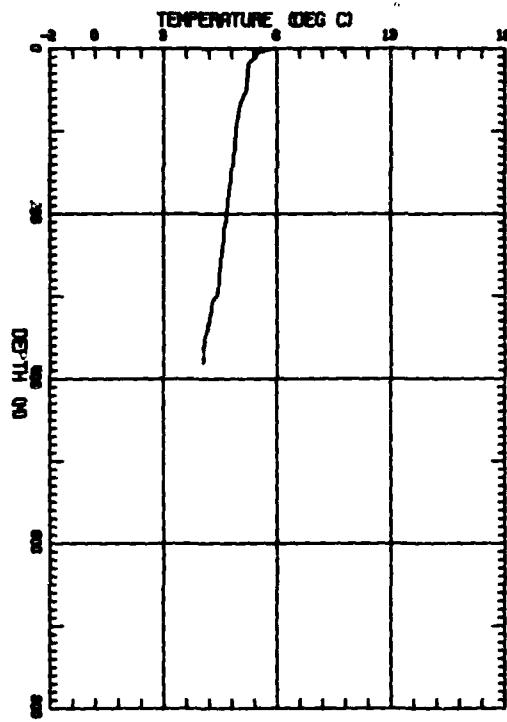
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 660 CHANNEL: 16 LATITUDE: 67 59.2
DATE: 5/30/87 TIME: 13:59:0 LONGITUDE: -2 -46.7



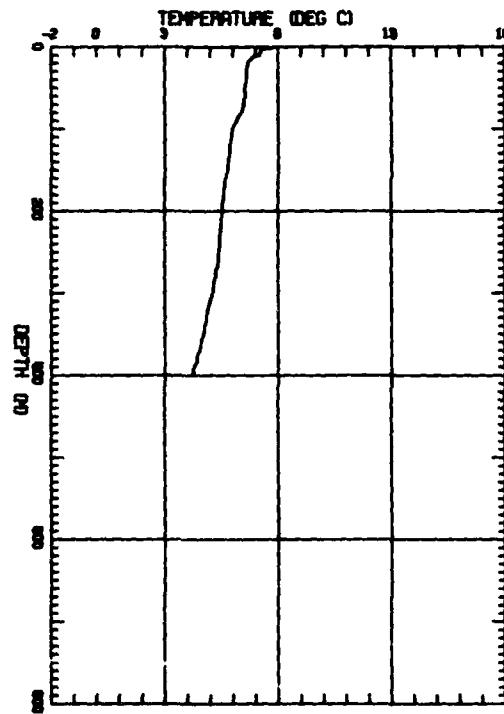
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 681 CHANNEL: 12 LATITUDE: 68 -2
DATE: 5/30/87 TIME: 16:54:0 LONGITUDE: -3 -20.1



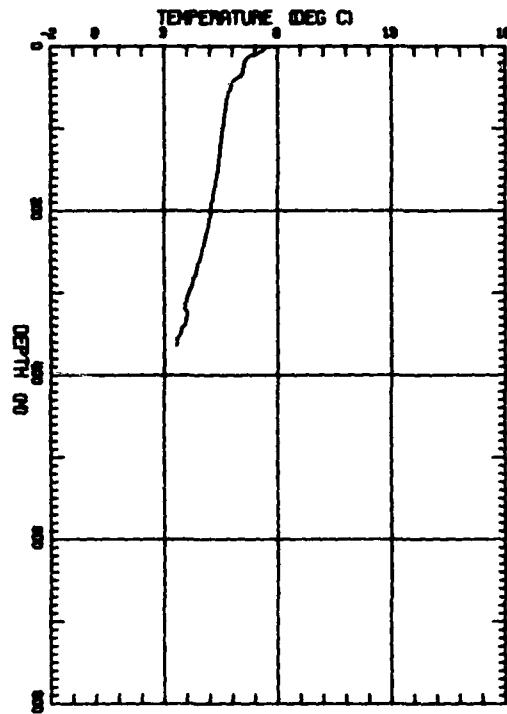
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 682 CHANNEL: 18 LATITUDE: 68 -5
DATE: 5/30/87 TIME: 16:11:0 LONGITUDE: -4 -38.5



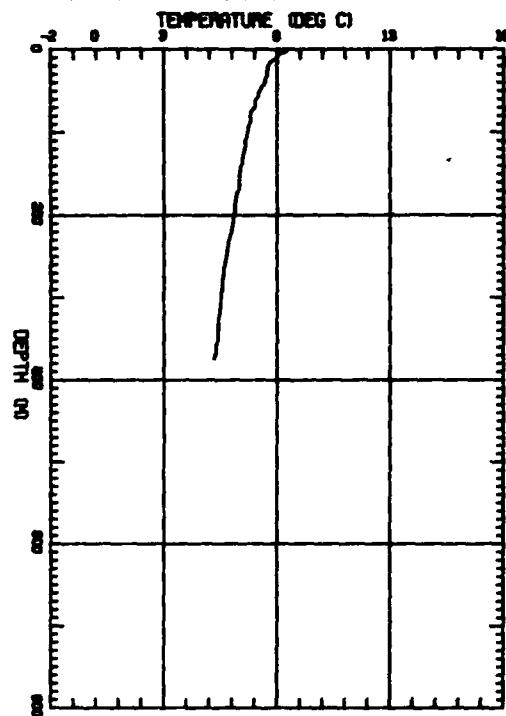
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 683 CHANNEL: 18 LATITUDE: 68 -4
DATE: 5/30/87 TIME: 16:17:0 LONGITUDE: -5 -58.2



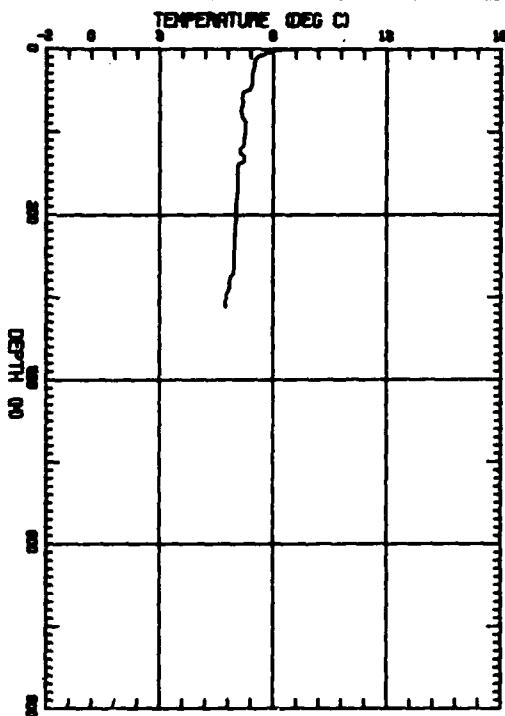
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 684 CHANNEL: 12 LATITUDE: 67 59.7
DATE: 5/30/87 TIME: 16:20:0 LONGITUDE: -7 -20.1



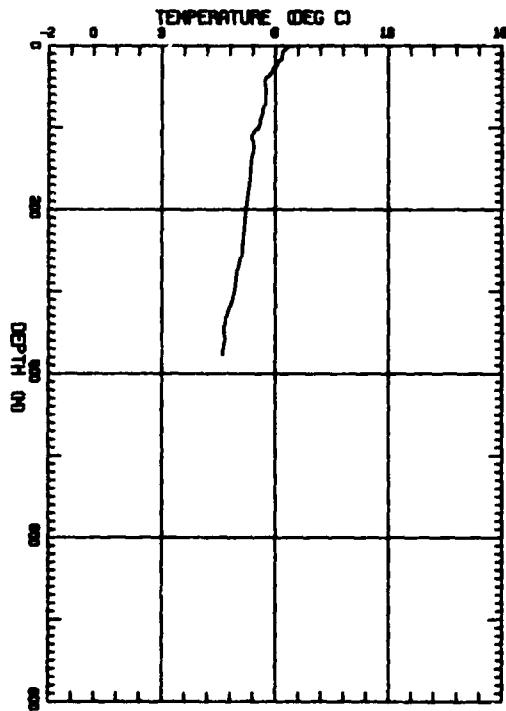
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 886 CHANNEL: 16 LATITUDE: 67 58.3
DATE: 5/30/87 TIME: 16:30:0 LONGITUDE: -6 37.5



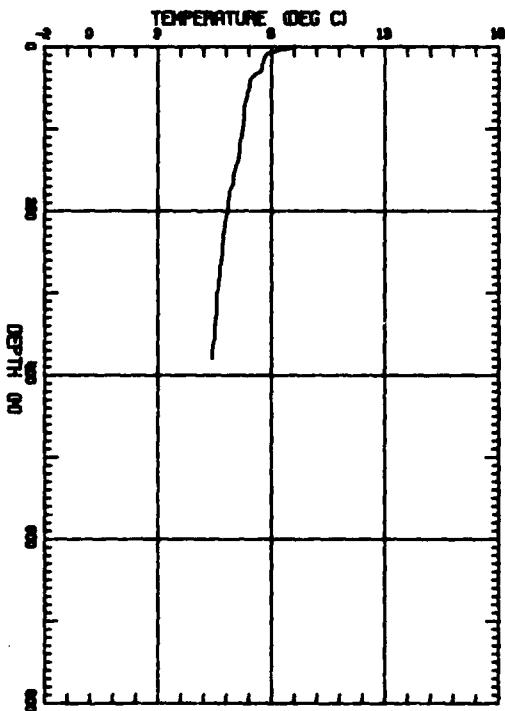
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 886 CHANNEL: 16 LATITUDE: 67 58.3
DATE: 5/30/87 TIME: 16:46:0 LONGITUDE: -6 21.9



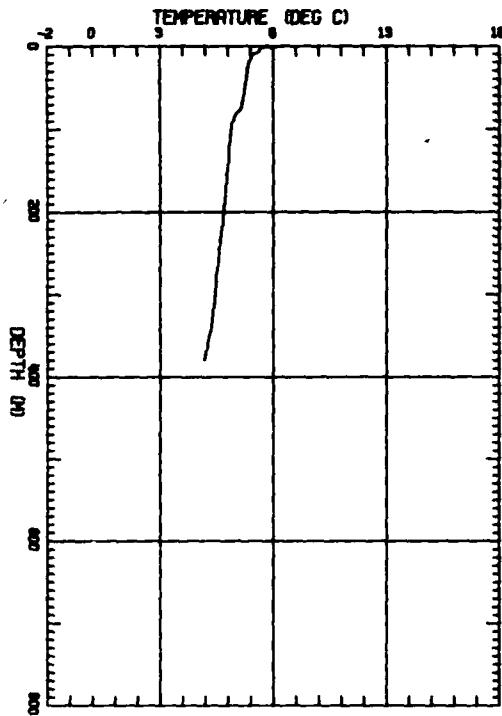
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 887 CHANNEL: 12 LATITUDE: 68 58.4
DATE: 5/30/87 TIME: 16:50:0 LONGITUDE: -7 47.7



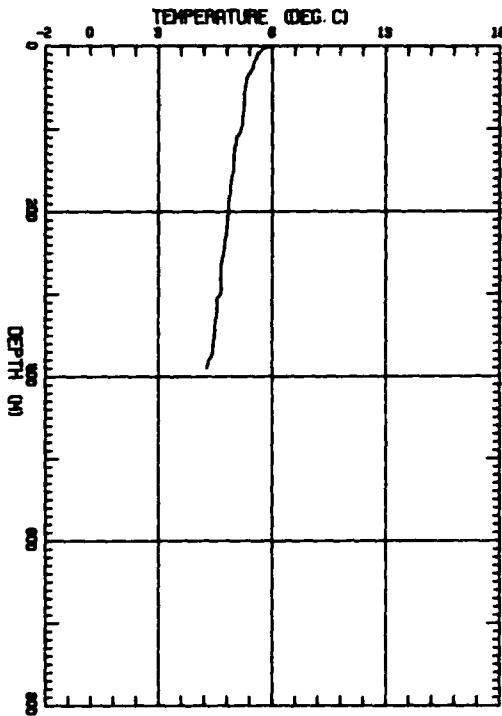
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 888 CHANNEL: 16 LATITUDE: 68 58.9
DATE: 5/30/87 TIME: 16:58:0 LONGITUDE: -6 47.7



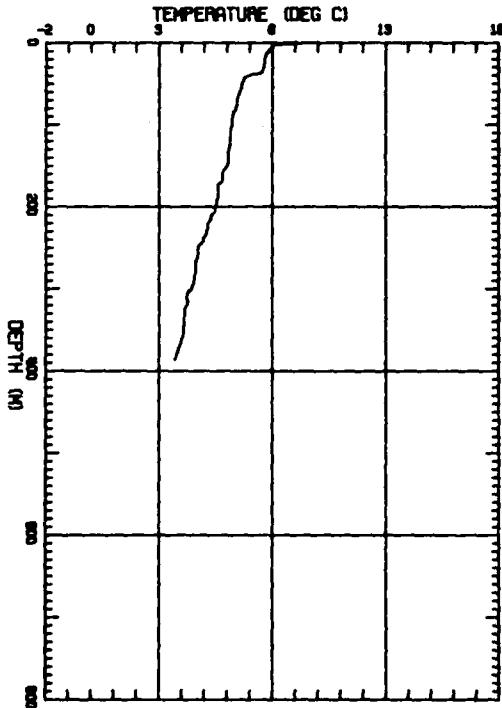
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 670 CHANNEL: 12 LATITUDE: 88 59.4
DATE: 5/30/87 TIME: 15:17:0 LONGITUDE: -3 -17.7



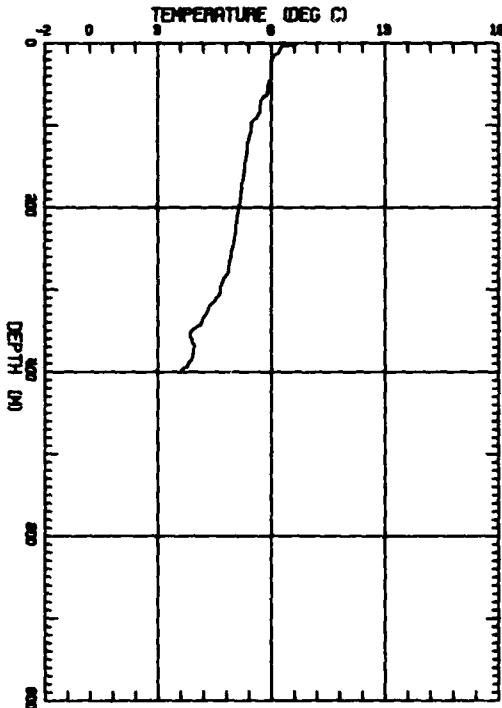
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 671 CHANNEL: 14 LATITUDE: 88 59.6
DATE: 5/30/87 TIME: 15:19:0 LONGITUDE: -1 -56.0



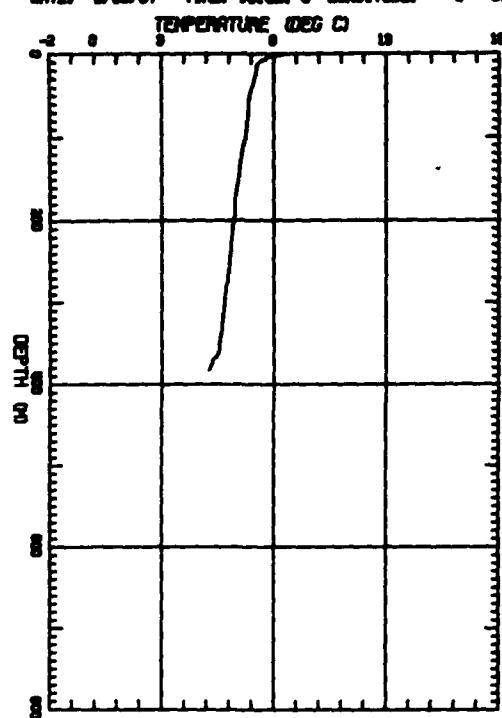
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 672 CHANNEL: 16 LATITUDE: 88 59.3
DATE: 5/30/87 TIME: 15:20:0 LONGITUDE: -1 -51.9



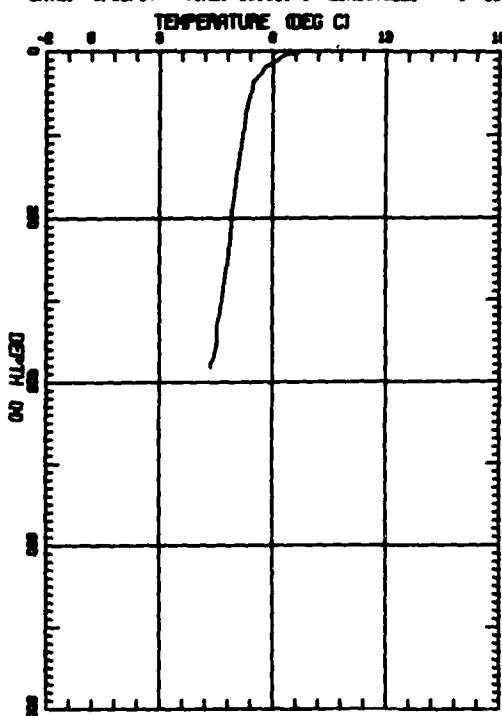
PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 673 CHANNEL: 12 LATITUDE: 88 1.6
DATE: 5/30/87 TIME: 15:27:0 LONGITUDE: -2 -2.6



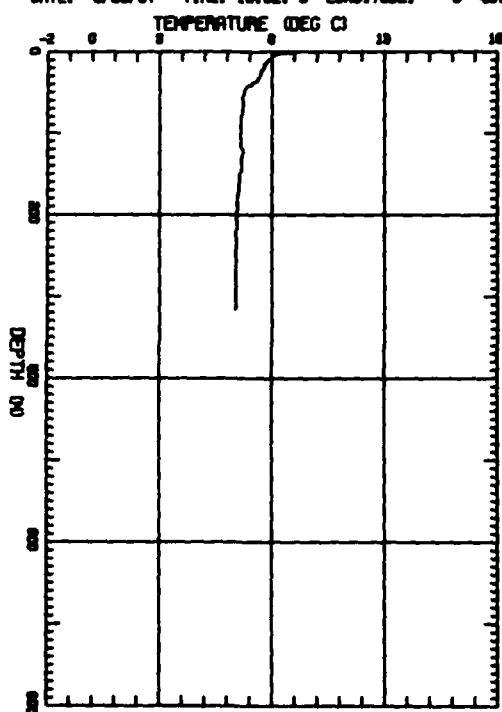
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 676 CHANNEL: 16 LATITUDE: 06 1.0
DATE: 5/30/87 TIME: 15:32:0 LONGITUDE: 9 0.1



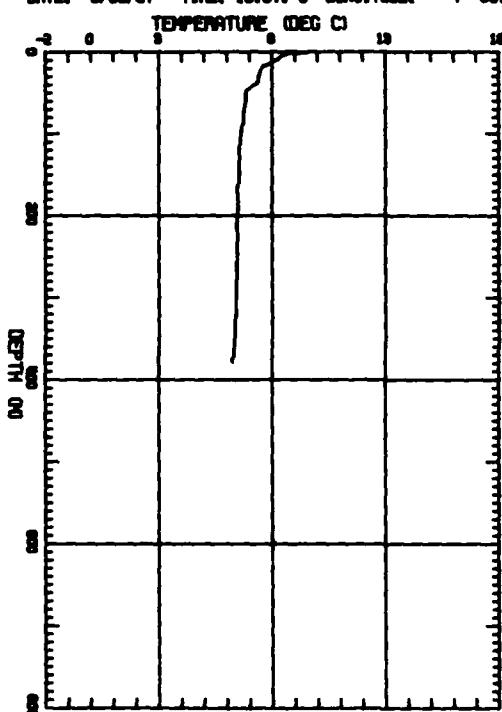
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 676 CHANNEL: 16 LATITUDE: 06 .1
DATE: 5/30/87 TIME: 15:38:0 LONGITUDE: 9 10.8



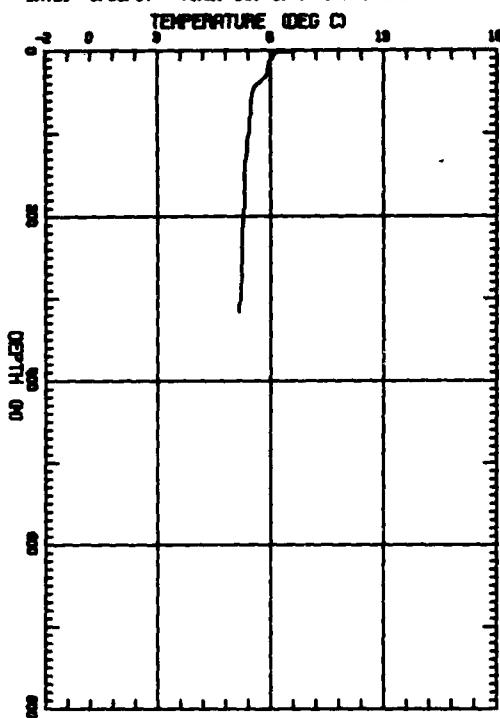
PROJECT: TACTICAL SCENOGRAHY
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DATE: 5/30/87 TIME: 15:52:0 LONGITUDE: 9 00.3



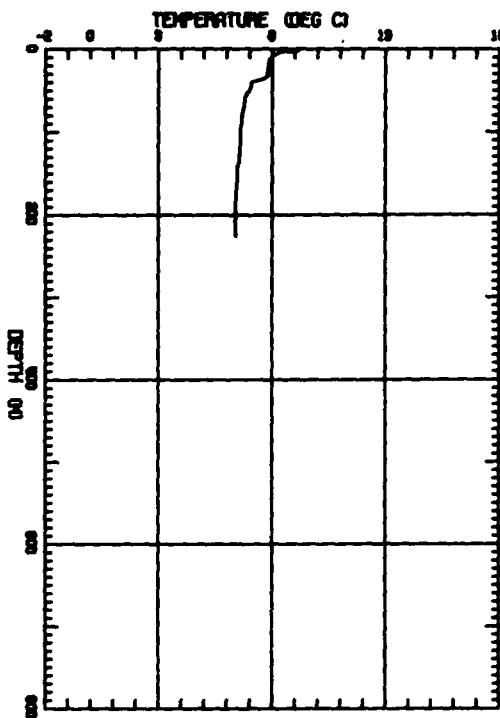
PROJECT: TACTICAL SCENOGRAHY
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DATE: 5/30/87 TIME: 15:57:0 LONGITUDE: 7 50.8



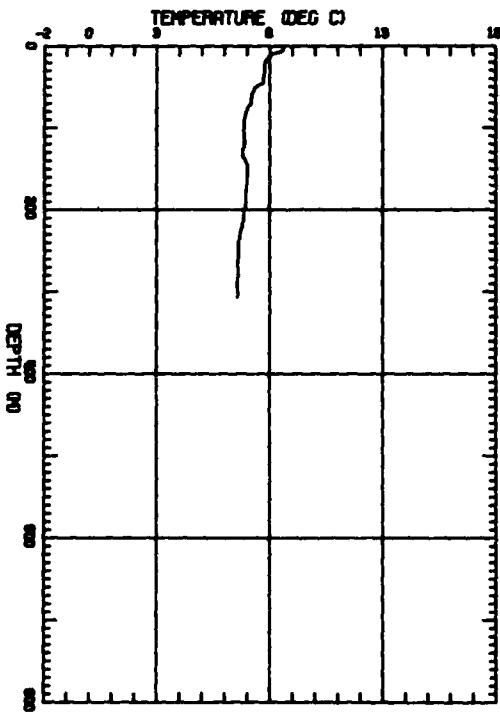
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 678 CHANNEL: 12 LATITUDE: 66 30.1
DATE: 5/30/87 TIME: 18:10:0 LONGITUDE: 7 58.8



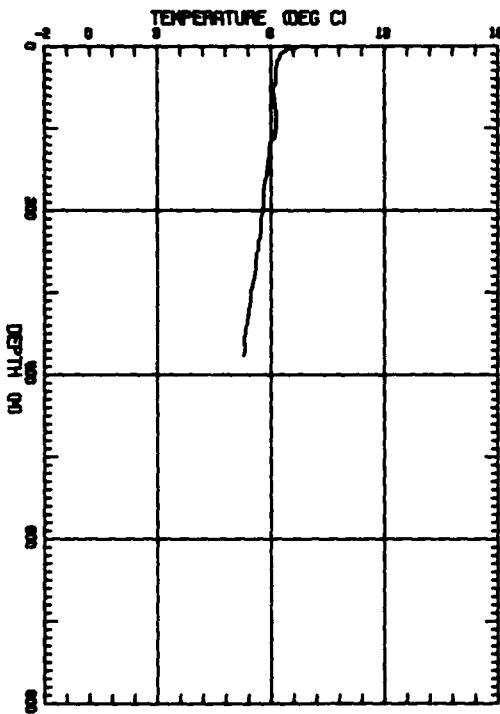
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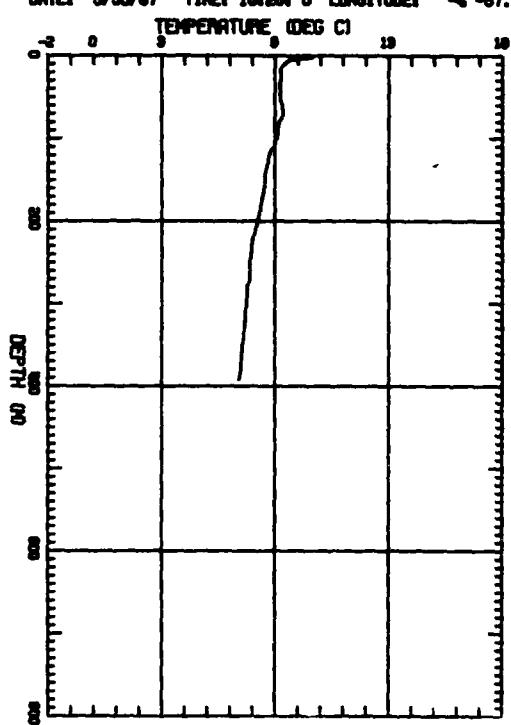
PROJECT: TACTICAL SCENOGRAHY
DROP NO: 681 CHANNEL: 12 LATITUDE: 66 50.3
DATE: 5/30/87 TIME: 18:10:0 LONGITUDE: 7 58.8



PROJECT: TACTICAL SCENOGRAHY
DROP NO: 682 CHANNEL: 18 LATITUDE: 66 50.8
DATE: 5/30/87 TIME: 18:20:0 LONGITUDE: 7 58.2



PROJECT: TACTICAL OCEANOGRAPHY
DROP NO: 888 CHANNEL: 16 LATITUDE: 65 30.0
DATE: 5/30/87 TIME: 16:28:0 LONGITUDE: -4 57.5



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19. ABSTRACT <i>(Continue on reverse if necessary and identify by block number)</i> Operational components of the United States Navy are becoming increasingly interested in the potential of coupled ocean-acoustic forecast systems for improving weapons effectiveness predictions. Such systems would combine in situ and remotely sensed data, historical databases, ocean hydrodynamic and thermodynamic numerical models and acoustic performance prediction models to give an improved picture of the ocean environment both in a "nowcast" and in a forecast mode. The Tactical Oceanography Program is a major focal point in NORDA's development, testing and delivery of such systems.									
This Note discusses the experimental design, data collection and processing, and some preliminary results from the First Tactical Oceanography Project Prediction Experiment in the Norwegian and Iceland Seas in May 1987. Detailed charts of the survey positions are presented, as well as plots of all of the profiles. A more complete presentation of the descriptive findings from the experiment is given in the companion NORDA Technical Note "Environmental Conditions in the Norwegian and Iceland Seas, May 1987" by J. Boyd.									
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